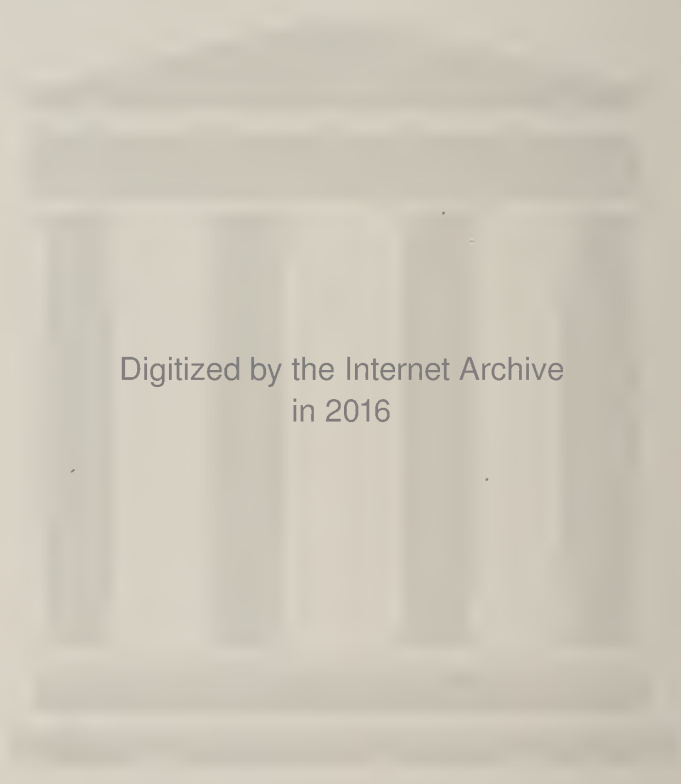


LIBRARY RL
OF THE
Theological Seminary.
PRINCETON, N. J.

PER AS 472 .A84 v.14:2

Journal of the Asiatic
Society of Bengal



Digitized by the Internet Archive
in 2016

JOURNAL

OF THE

ASIATIC SOCIETY.

*On the Buddhist Emblem of Architecture. By Capt. T. LATTER, B. N. I.,
Assistant Commissioner, Arracan. With two plates.*

MY DEAR SIR,—I do myself the pleasure of forwarding, for the inspection of the Asiatic Society of Calcutta, the accompanying portions of a Boodhist Sculpture, (fig. 1.) brought by me from the old town of Arracan; and as they present some peculiarities, I have no doubt that the following remarks will be acceptable.

They formed the upper part of a figure, one of which was sculptured on each side of the entrance into the court of a sort of small cave temple; and they are interesting on account of the Rose which surmounts the figure, and which is identical with the Rosette of Architecture. It was the only one of such emblems, to which I could not at once apply a *Boodhistical* interpretation; and the discovery of this one in a position that could not admit of a doubt of its meaning, and that meaning exactly in conformity with what I expected it would have been, was a source of much pleasure to me.

I will then now proceed to give you a *Boodhistical* view of the emblems of masonry, and I do so with some hesitation at the risk of being accused of riding my hobby, “*jusqu’ à l’outrance*,” as I am aware that my remarks are of a speculative character: still, as they are the only attempt that has been made, as far as I am aware, at explaining these architectural emblems on philosophical grounds, they may be both interesting, and the means of drawing the attention of others to similar subjects.

In the following pages I shall confine myself to the explication of those emblematic ornaments which occur in the Doric order, that "first-born of Architecture," because, being the most antient, its emblems are of the most pure and simple type, and have none of those confused and meretricious additions which we find abounding in the later orders, as the Corinthian and Composite.

I have already had occasion* to remark, that I considered Boodhism to have been a metaphysical system emanating from an Egyptian fountain; that it was introduced at a very early period into Hindustan; that it there became influenced by local circumstances, as also probably by fresh importations from the original source. Boodhism appears, thus, not only to have acquired various local types, but likewise, after being so altered, to have diffused itself, as it were, from new centres of motion, and thus to have given rise by mutual interferences, to varied and mixed results. We find this illustrated in the history of modern Boodhism, (that of Gaudama). We read of its being imported, from a certain source, into regions where it was previously unknown; of its dying away from negligence, or persecution, in its early strongholds; of its again drawing fresh life from its young offshoots; and thus, finally, presenting in its original seat, a phase modified by the provincialisms, with which it had been imbued. This is the case with the Boodhism of Ceylon; which was imported into trans-Gangetic India, became afterwards nearly extinct, and was revived by fresh supplies from Siam, &c. I, in the same paper, endeavoured to trace the mental process by which Boodhism progressed into heathenism; viewing it in fact, as the incipient stage of what is usually styled Idolatry; leading naturally into the degrading cult of Fetichism. I also pointed out how that Boodhism, in its early, and comparatively pure state, (influenced by that craving after substantiality inherent in human nature) endeavoured to realise its ideas, first by numbers, next by symbols consisting of numerical combinations, and finally, by employing living animals, and their representations as types. Considering Boodhism then as I did, as emanating from an Egyptian source, I naturally was led into comparing it with those systems which were acknowledged to have had such an origin, and especially with those which delighted in expressing

* Vide "Note on Boodhism," published in McClelland's Journal.

themselves by symbols, and representations. We know that those antient mysteries, a lineal descendant of which has come down to the present day, obeyed this description; they were Egyptian in origin, and were symbolie, and emblematic in predilection. It was in these mysteries in which was locked up the craft of Architecture; and it is on the results of that science that we are likely to find impressed the appearances we have alluded to.

The emblematic ornaments then, to which I would draw your attention, are the Triglyph, the Dentals, the Bull's or Ox's skull, and the Patera or Rosette. And before entering upon them I must premise that, if we were to view a building with the eyes of that craft, to whom through a long line of ages was consecrated their structure, and their charge, the ornamental parts would aptly be emblematic of "perfection." Or to use the phraseology of the speculatists, having reared up a mental structure complete in all its parts, and comely in all its proportions, we proceed to add to it those ornaments, and to enrich it with those gifts, which, though not necessary to its usefulness, add to its grace and beauty. It would be needless for me to go through the pages of antient authors to illustrate this point, but we find it abundantly instanced in the writings of Paul, who deeply conversant with those mysteries himself, not only continually endeavoured to point out their hidden purport, but likewise was anxious to connect them with the high spiritualism of the new faith he had embraced. Thus he declares, that Jesus Christ is the "chief corner-stone," (Ephes. ii. 20,) "the true foundation," (1 Corinth. iii. 11.) He then tells his hearers to build upon this foundation, and he reminds them that "every man's work shall be made manifest; (*φανερὸν γενήσεται*, "shall become publicly known,") for the day shall declare it (*δηλώσει*, shall expose it); that it must stand the test of fire, before the workman (*μισθὸν λήψεται*,) shall take his wages; and he curiously adds, that if however "any man's work shall be burned," (*i. e.* not be able to stand the test of fire) *ζημιωθήσεται* "he shall be fined,"* but he himself shall be saved, yet so as by fire." (*Ib.* v. 13. et seq.) All these are technical

* This is the most correct and literal rendering of this word, for it is the 3rd person singular ("he") 1st future indicative ("shall") passive voice "be") of the verb of *ημια*, which in this voice can only make sense, by having accorded to it its general acceptation of "mult, punishment by fine."

allusions that must speak to many of my readers; and further to identify them, he actually employs a still more technical phraseology, and commences (v. 10.) by alluding to himself ὡς σοφὸς ἀρχιτέκτων “as a wise master mason,” rendered in the established version “as a wise master builder.” On another occasion he refers to that Great Architect of the Universe, whom he declares τὰ πάντα κατασκευάσας, hath “built all things,” (Heb. iii. 4.) And again he emphatically declares, that it was by revelation that was made known to him the true purport of these mysteries (κατὰ αποκάλυψιν ἐγνώρεσέ μοι το μυστήριον. Ephes. iii. 3.) “the revelation of a mystery which had been kept in silence (σεσιγημένου) since the world began.” (Rom. xvi. 25.) He asserts, that he was peculiarly sent to enlighten *all men* upon what this “fellowship of the mystery” really is, (φωτίσαι πάντας τις ἡ κοινωνία τοῦ μυστηρίου. Ephes. iii. 9.) And a little further he gives a climax to his spiritualising interpretation of this “fellowship of the craft” by picturing its consequent to be a comely structure harmoniously joined together, and cemented by the secretion of every joint (διὰ πάσης ἀφῆς της ἐπιχορηγίας) in the proportionate and individual action of each separate part, which thus progresses εἰς οἰκοδομήν ἑαυτοῦ ἐν ἀγάπῃ to the building, (literally, house building) of itself in Love. (Ephes. iv. 16.) Thus closing with the watch-word of those mysteries to which he referred.*

I shall have again occasion to revert to this portion of my subject, and place beyond a doubt not only the intimate acquaintance that Paul had with these mysteries, but likewise shew that his writings prove

* What I have advanced here is simply thus : that not only was Paul initiated into those antient and secret mysteries, which were associations of brotherhood; but that he wanted to point out that their inculcations of fellowship and love, and of the performance of high morality were in themselves insufficient; that they required the vivifying Grace of that Being, whose faith he had adopted, and that this mental edifice required to be built up, not upon one's own foundation, but upon the foundation, and in the spirit of Him, whose Apostle he was. Thus he declares, that the true view of these mysteries had not till then been pointed out. Indeed the whole circumstance is one of many instances exemplifying Paul's transcendent qualities as a Pleader; wherever he may be, whoever he may be addressing, he invariably seizes upon some existing peculiarity, some belief identified with local predilections, on which to fix the consecutive glories of the magnificent cause he was advocating; and thus disarming suspicion, and unopposed by prejudices in the outset, he proceeds in one train of powerful induction, to enunciate the startling truths of which he was possessed.







that he truly was, as he declares himself to have been, ἀρχιτέκτων "a master mason;" for that he alludes, as far as he was enabled by his obligations to do, to certain appearances in that grade, which can be appreciated only by the initiated.

Having then thus premised that the ornamental parts of a building were aptly emblematic of perfection, it is only in connection with the idea of objects of perfection, that we must endeavour to search for a resolution of their meaning.








The Triglyph, ("a." fig. 2.)

The earliest edifices having been of wood, and the more antient type of stone buildings conforming in a great measure in their simplicity to what we might consider the early wooden buildings must have been, most practical masons endeavour to account for the origin of the Triglyph, by viewing it, as a representation in stone, of three props, which were stuck up between the architrave, and that part of the cornice in which the ends of the beams that support the roof, project. And this view seems at first sight plausible, as they invariably occur immediately under the mutules, which last have very much the appearance of the ends of projecting beams. But if the construction of the Triglyph be examined, this will be at once shewn not to be the case; independent of which it is much more probable that the primitive builders put a solid oblong block, to support this most important part of the edifice, instead of leaving it to the strength of three slim sticks, or bits of planks. In fact, it was a solid block which, from the important functions it had to perform, viz. to support in the first instance the whole weight of the roof, and in the second to keep it clear of the architrave, was happily impressed with the most sacred of all emblems, in all ages, among all nations, the *Triglyph*.

This quadrangular block was the prototype of that hewn and "cubic stone," which plays so important a *role*, in modern masonry. It was, according to Duteil, emblematic of *legal*, as the unhewn stone was of *natural*, justice; and was consequently employed in early ages as the seat of judges, and is, he says, the ξέστος λίθος placed by Homer, in the third Odyssey, before the portals of Nestor. It is likewise an emblem found on Buddhist coins, and has by some been taken for an altar. It will be remarked by examining the Triglyph of Architecture (fig. 3,) that it is so constructed as to leave no dispute of its meaning;

two of the glyphs being complete, (*a a*) the third being split down the centre, and one-half being on each edge of the block of stone, (*b b*). The Triglyph, or combination of three scores, has been throughout all ages the symbol of the Deity, the Tri-une God; we find them variously combined; sometimes in the form of a star , sometimes in that of a  which is the early type of the sacred *Tau*,* so expressive a character among the antient Egyptians; and generally held to be symbolic of "eternal life." They may be found again thus  And in many other forms, such as  which is the simplified form of the Cabalistic Abraxas, (fig. 4,) typifying the sun, or thus  emblematising the most simple as it is the most powerful resolution of forces, and the one to which all others may be reduced. On the three Yods impressed on the Hebrew Abraxas, (fig. 5,) and the three wings of a hawk, symbolic of the idea "God," found on that of the Egyptian, (fig. 6.) I have already had occasion to remark, (Note on a Boodhist symbolic Coin, published in the Transactions of the Society,) that these three scores compose the word  *Allah*, the term for "God," among the Mohammedans, and which becomes the more marked in the Cufic characters,† composing that word. It is a very common, and abundant figure in Boodhist symbolism, and the interpretation given to it in the paper on the coin just referred to, was immediately acquiesced in by several learned natives and Boodhist priests, to whom it was shewn on my return to Arracan.

* Vide some remarks on this character by the Author, "Introduction to Grammar of the Language of Burmah," p. xxxix.

† In those characters  the final  is shewn to be a member of the word, and to be radical, the same as in its Hebrew analogue  *alahim*, in which last the *plurality* of the root is evident. Thus in the plural number it is the word used for "God," in many parts of the Bible; and throughout the first chapter of Genesis, especially verse 26.  "Then said the Alahim (God,) *we* will make, &c. &c." The discussion of the characters that compose the Arabic word  is foreign to my present purpose, but I will merely say that I consider the initial  *alif*, in no wise belonging to the word itself, but being a sort of formative prefix, article, or epithetic; that the second character *now* pronounced, and considered a  *lam*, was originally, perhaps long before the existence of alphabetical characters, pronounced as an "*alif*;" and that the *expressive* part of the word consisted, like the Hebrew term, of the *sounds* of simply *Alif*, *Lam*, and *He*. Some of the modern compounds of the word place the view I have given, if not beyond a doubt, at least far within the realms of probability.

I have proposed to myself in this paper to confine myself to a *Boodhistical* view of these emblems; and such view enables us happily to explain the reason why, whilst two of the glyphs are entire, the third should be complete, and yet not whole. According to Boodhism, there first existed *Boodha*, "Supreme Wisdom." From this emanated *Dhamma*, "the Law." And from *Dhamma*, come those who fulfil it, *Thenggha*, "the Congregation of the Saints." These are necessary sequences the one of the other; no second among them being able to be, without that which precedes. *Boodha* has existed, and therefore its emblematic glyph is represented entire, and complete; *Dhamma* has existed, and its emblematic glyph is likewise entire, and complete; but *Thenggha* has not yet perfected its existence, and therefore its glyph is represented as existing, but not perfect and entire.

The Dentals, (fig. 2. "b.")

Immediately under the Triglyph, and on the face of the architrave, we find a number of triangular drops, or figures called from their shape, Dentals, or Dentils. In some cases they are *six* in number, but in others, the more correct and antient, they are *five*. I have remarked, in the case of modern Architecture where there has been a vitiated triglyph composed of three *whole* triglyphs, (fig. 7.) that the Dentals are six in number; whereas when they occur in connection with the true triglyph, they are five. The number five in the mind of a Boodhist typifies the five commandments, in fact the law;* but it is singular, that if such a one, speaking the Pali dialect, were to draw the attention of another person to these Dentals, he would employ the term *pěgnytsěng*, (pronounced something like *peentseng*) to identify them; and this is the technical term employed to express the five commandments.† This



* Conf. Grammar of Burmese Language, p. 90.

† As it bears upon the typical value of the number "five," I have inserted the following portion of a note published in the work already alluded to "the name of the number five" (*pegnytsa*,) in the Pali language is composed of *pegnya*, which implies "wisdom, understanding;" the final *tsa*, is an expletive in very common use in the Pali language. It has been shewn (p. 90) that, in the eye of the modern Boodhist, the number 5 typifies the five commandments, in fact the law. It will be self-evident to the intelligent mind, how naturally that the fulfilment of the law was identified with "wisdom," and "understanding." Examples might be multiplied to show that it was so in the minds of the early races of mankind: "Behold, the fear of the Lord, that is wisdom; and to depart from evil, that is understanding." (Job. xxviii. 28.) "Give me understanding, and I shall keep thy law; yea, I shall observe it with my

word is composed of the roots *pěgnytsă*, or *peentsă*, "five," and *ănga*, "parts." The term *ănga*, however, has a somewhat peculiar power, it not only means the "part" of a "whole," or the "member" of a "body;" but it implies that such "part" or "member," as far as regards its own individuality, is a complete object in itself. Thus, (Judson's Burm. Dict. in voce.) the cavalry, infantry, elephants, and chariots of an army, are styled *ăngas*, of that army. And it is thus that these five distinct Dentals having each an individual completeness in itself; but going towards the composition of a whole, would be styled *pěgnytsěng*, "the five *ăngas*." I have already observed that, speaking Boodhistically, from "Supreme Wisdom" "(*Boodha*) proceeded the Law," (*Dhamma*). Or to speak in other words, it (*Dhamma*) may be said to be the mode in which *Boodha* ("Wisdom") manifests itself to the *Thěnggha*, or "Congregation." Thus, as far as regards that "Congregation," *Dhamma* is "Wisdom." Or to speak so as to be understood by Christians, the Deity can only be appreciated by his followers in what he reveals of himself; now the revelations of himself by the Deity, to be consistent with the awful grandeur of his character must necessarily be commandments, the dictations of His Will. For it would be utterly inconsistent with a proper appreciation of that Being, to hold that he converses, in the usual acceptance of that term, with His creatures. This idea is carried out in all Eastern dialects; a term such as the Persian *فرمودن* *firmoodun*, which, when applied to the act of an equal, would imply "to order;" when referring to that of a superior, simply conveys "to speak, say." I have been particular in explaining, how that in one point of view the Deity (*Boodha*, "Wisdom") and His Law (*Dhamma*) are identical, and have mentioned that this *Dhamma* is typified by the number "five;" for thus is explained how the Pali name of that number (*pěgnytsă*) is deducible from *pěgnyă*, "wisdom;" and it may guide us to the understanding of Hor Apollo, where he says (Lib. I. c. 13.) that among the

whole heart." (Ps. cxix. 34.) The same connection between "knowledge, wisdom, and understanding," and the precepts of the law, exist in the Burmese language.

The pure Burman term for these five commandments is  *thiedeng*, which

implies "news, information;" and is composed of the root  *thie*, "to know, perceive, understand," and  *teng*, (with, or without the points) "to contain, hold, &c." Introduction to Grammar of Burmese Language, p. xi.

antient Egyptians a star represented "the Mundane God, likewise fate, likewise destiny," likewise the number "five." This Star was five-rayed, and is used in those mysteries, which have come down to us to represent the same idea that it did among that people; and, from what has been said, it is probable that it did not exactly represent the idea of "God," but of that revelation of Himself alone appreciable by men, viz. His Law. The five commandments composing this Law are merely inculcations of those duties, the performance of which is absolutely necessary for the preservation of social order, and happiness; in fact, they are the five points of fellowship, viz. refraining from, 1st, *panatīpata*, "destroying life;" 2dly, *ādiennadana*, "theft;" 3dly, *kamēthōmiets-tshatsara*, "adultery;" 4thly, *mōōthawada*, "falsehood;" and 5thly, *thooramērāyāmādzdzhāpamadāhtana*, "intoxicating drinks." It will be remarked how truly all these may be styled points of fellowship, referring as they do solely to those duties necessary for the maintenance of order in society, and not, as in the Decalogue of the Hebrew, inculcating any of the obligations due to one's God. Another connection between the number "five," and a "god" in Boodhism, is shewn by the circumstance that Boodhism holds that there are "five Boodhs,"* who characterise the present world; four of whom have appeared, and the fifth who is yet to appear. We find a similar connection existing in reference to *their* sacred number, in *Brahminised* Boodhism as it obtains among the Nepalese, for they hold that the number of Boodhs is "seven;" (vide, Hodgson's Tracts on Boodhism,) *that* being a sacred number in Brahminism, and among the Semitic families of the globe, but enjoying no particular sacred value in true Boodhism.

Having thus discussed the Triglyph and Dentals, we will proceed to those ornaments which are generally placed on the metopes of the frieze. These generally are the head of a dead Bull, or Ox; or a Rose, or Rosette, generally styled a "Patera." I have already remarked, that it is only in connection with the idea of perfectibility that we must endeavour to realize the symbolism of these emblematic ornaments. We have already seen how that *Boodhistically* viewed, the Triglyph emblematises the union of *Boodha*, *Dhamma*, *Thēnggha*; forming when

* A *Boodh*, comes nearest among them to the definition of a God, being the sole true object of worship.

united the *Thāraṇāgōṇ*, "the Supreme and decisive attributes." It is thus that in the Burmese (a Boodhistical) language, when the term *thōṇ*, "three," is applied in an attributive signification to a person, in fact if it be said, "so, and so threes," it implies that he performs those moral duties and obligations, that make him a member of the *Thēnggha*, that "Congregation" who fulfil the "Law," thus making himself one of the THREE. I have also endeavoured to shew how that viewed in a similar light, the Dentals would admirably represent *Dhamma*. And now I proceed to point out how that the Ox's, or Bull's skull, and the Rose, in the same way, represent the numbers of the *Thēnggha*.

We will recapitulate that the earliest symbols by which Boodhism endeavoured to represent her ideas were numbers. This we have shewn by the attributive signification of certain numbers in Boodhistical languages, which only can be accounted for by their allusions to certain tenets of the Boodhist faith. For instance, if it was held that such and such, or so many components, or qualities, existed in the various individualities of the physical and metaphysical world, then the name of that number necessarily conveyed the idea of, and typified them. The next step was materialising into tangibility these numerical types; this was done by the corresponding number of marks or scores. This class of symbols appears to have been more used for the illustration of those higher objects and ideas, which did not pertain to mankind, and his converse here below. Soon, however, certain objects of the animal creation were chosen, on account of certain peculiarities in their temper, conformation, or mode of existence, to represent cognate ideas, especially in connection with the correspondent qualities among mankind. Thus, there are three grades in the *Thēnggha*. 1st, the *Boodhithatwa*; 2ndly, the *Pratyeka Boodha*; 3rdly, the *Thrawaka*. The first was typified by an *Ox*, the second by a *Deer*, and the third by a *Sheep*. (Conf. Travels of FOUK KOE KI, by A. Remusat, p. 10.) The first then is the one to which we must look for the interpretation of this Ox's or Bull's skull,* which we find forming an ornament of these friezes, (fig. 2. "c.") I am aware, that it has been generally attempted by practical masons to explain the presence of this skull, by holding it to

*This mode of representation by synecdoche is very abundant in hieroglyphic, and emblematic sculpture; the head being employed as an abbreviation of the whole animal: thus we say, so many "head of cattle."

refer to the sacrifice of bulls and oxen;* but then in that case, it would have been the representation of the head of a live animal. Dutail considers, that the circumstance of its being the head of a dead animal, (referring to the instance of the representation being that of dead Ram's head,) alludes to the destruction of the world by fire, when by the precession of the equinoxes the sun shall again lead the opening year in the constellation of Aries. (Dict. des Hierog.) Dupuis likewise (Origine de tous les Cultes,) declares the worship of the Bull originated at the period when that luminary opened the year in Taurus. Indeed he considers that all the various religious myths referred to the sun. That Hercules in his twelve labours was the sun in his twelve zodiacal signs; that Jason in search of the fleece of Colchis, was a mythological allusion to the god of day entering Aries; he supports the accusation, brought by its early opponents, that Christianity was a species of Mithraism, and declares that the birth of Christ was nothing but a spiritualism of the sun in Virgo. Without disputing these positions, we have still to account how this animal was held in such high veneration, as to have had accorded to it, with others, this stellar apotheosis, necessary to have enabled their version of the myth to have had an origin. We see how Boodhism explains this by having employed them as types, and the animal under discussion, as the representative of the highest moral perfection that humanity is capable of; and I shall proceed to show how perfectly in keeping it was that the crowning point of this perfection should be held to be "DEATH."

It is the *Boddhithatwa* "the perfecter of wisdom," who alone is able directly to attain *Niebhan*, "the not to be," without having to undergo any more transmigrations. It is for this state of annihilation that every Boodhist pines; and *it* can be attained but by death alone. In all those mysteries which were held in such high veneration by the Antients, and the types of which have descended in a chain of unbroken succession even to our own days, the attainment of the crowning point of the craft was typical of Death. It was alone by passing through the vale of its shadow that perfect light could be obtained. Apuleius, in the eleventh book of his *Metamorphosis*, or *Fable of the Golden Ass*,

* It is singular to remark how rapidly this mistaken idea was adopted by the Greeks; for we find very often the friezes of the Corinthian order occupied by a long sacrificial procession.

describes minutely this completion of initiation: the night-like darkness; the approach to the confines of Death; and then in the very midst of this darkness, the light revealed to him. In some of the various versions of these mysteries, it is said that the candidate was shrouded in the shudder-cloth of Death, was placed in that narrow home to which we all must go, was raised again, and went forth the new-born, and perfect craftsman. In others, it was represented by the candidate passing through an oval, symbolising that as he entered into this scene of woe, so must he go forth again. Thus was it that we find Death styled in antient writ "the portal of life." It was thus that clefts in trees, and openings in rocks were ever held in veneration among the vulgar of all nations; passing one's body through them is a regenerating process gone through by Hindoo devotees in the present time, and even in our own land the practice it is said exists in some parts of the country of passing children through such openings to cure them of the rickets. A similar ceremony is the bathing in those *khonds*, (typical of the opening of the womb,) or still pools, where a river enlarges into a circle, and which is held in India as a regenerating process.

We find the Apostle Paul referring in a most marked manner to certain appearances in the celebration of this grade, and he too yearns for the time when he shall know perfectly. I allude to the often-quoted chapter the 13th of 1st Corinthians. The word there translated "charity,"* is in the original *ἀγάπη* "love," and implies that bond of brotherhood which ever was the watchword of those mysteries which he speaks of in the 2nd verse of the chapter. The whole bent of the chapter is singly this; it is one of the many allusions he makes to these mysteries, and he says, that although he may be ever so well read in them, and be able to expound them ever so clearly, yet if he is not imbued with that "love," which is the foundation-stone of them all, it profiteth him nothing. And he goes on to say, that in this life we can but know in part, and we prophesy (announce) in part; but that when the end shall arrive, then that

* The word "charity," in the confined import which we give to it, is little else than *ἐλεημοσύνη* "alms giving;" but it is derived from the Greek *χαρις-ιτος*, which is a most expressive root, implying that union of "mercy, thankfulness, and love," which goes to the composition of that exquisite quality "grace;" a quality which, whilst it is an attribute characteristic of a God, is still to be discerned in the tracery of a leaf.

which is in part shall be throughly rested from labour. I quote the original with the accepted rendering, and will detail why I give the metaphrastic version above. ἐκ μερους γὰρ γενώσκομεν, καὶ ἐκ μέρους προφιδεύομεν· ὅταν δὲ ἔλθῃ τὸ τέλειον, τότε τὸ ἐκ μερους κατερηθήσεται. "For we know in part, and we prophesy in part. But when that which is perfect is come, then that which is in part shall be done away." The word here translated "prophesy," is προφιδεύω, and implies correctly, "to announce, explain," as the oracles of a God. The word rendered "perfect," is τὸ τέλειον, the neuter of the adjective of τέλος, "the end." This connection between the ideas of "end" and "perfection," exists in all languages. The word rendered "shall be done away," is καταρηθήσεται, which literally bears the interpretation I have given it; κατα in composition implying, "completeness, thoroughness;" and ἀρλέω being derived from a privative, and ἔργον "work." He proceeds in his allusion, and says, "For now we see through a *glass* darkly; but then face to face: now I know in part; but then shall I know even as also I am known." It is easy to perceive to what he refers, when he says that it "was seen through a glass; but *then* face to face;" the "then" alluding to the time when that which was in part should be done away, when that which is perfect, (the end) is come; the seeing it "face to face," alludes to when he shall stand in the presence of the Great Revealer of all secrets, who will then expound to him all the mysteries of His Will. What is still more singular is, that the word rendered "darkly," is in the original ἐναινίγματι, "in covert allusion," or "emblematically expressed." We may gather then the following particulars from this description: 1st, of all that he refers to something typifying the approach of death, the coming of the τὸ τέλειον; 2ndly, that during that, something typifying Death, he saw something through a glass; 3rdly, that this last was expressed enigmatically, or by an emblem; and 4thly, that it in its enigma referred to the Revealer of all mysteries, whom he was to stand "face to face," with, when the time came that he should know, even as also he was known. We have seen how that among the antient Egyptians, the first mystagogues of Antiquity, this Being was emblematically represented by a Star; and we have said that the Egyptian Star was invariably five-rayed.

I have thus, I trust, sufficiently explained why this Bull's or Ox's skull, typical in Boodhism of the highest grade, the *Boodhithatwa*, is represented as pertaining to DEATH; that END being itself most essentially necessary to the fulfilment of perfection.

Rose, or Rosette.

We now come to the last of these emblems, which I propose to discuss; viz. the Rose-shaped Ornament often found occupying, like the preceding, the metopes of friezes. This ornament is, I believe, generally styled a "Patera," by practical architects, and is held to be a representation of the dish which was employed in the presentation of offerings among the Antients; but it must be a singular sort of a dish to have the petals and stamens of a Rose. It is met with under variously altered forms, sometimes presenting a type so vitiated, as to have lost almost all its floral characteristics; but it is much more similar to a Rose, than is the so-called Rose Ornament of the Corinthian Abacus, which we shall have occasion to discuss more fully. In the case of modern buildings, where, on account of their public character, attention has been paid to their details, I have observed that this ornament has preserved, if I may use the expression, its botany; whereas in private, or carelessly executed edifices, it is difficult at times to recognise it. It is found alternating with a sort of lily-formed flower at the base of the Doric capital immediately above the Astragal.

Considering it then, as I did from the very first, as a Rose; it was as I have remarked in the commencement of this paper, the only one of these ornaments to which I could not immediately apply a Boodhistical interpretation. Still, as Boodhism was so fond of recording her ideas in symbols, and as she was by no means restricted in her choice to the animal kingdom, and as this emblem, from its occupying the position of others importing "supremacy and perfection," must necessarily have had a kindred power; it appeared to me in fullest keeping, that the Rose should be there, as the most appropriate deputy from the floral regions of Creation, the fittest representative "after its kind" of such high qualities. It was therefore with no small delight that I found this regal flower occupying a place in Boodhist sculptury, which left no ambiguity to its meaning; and in a position identical with that in which it is often found in modern Architecture, viz. on each side, and

towards the upper angle of a porch, or gateway. This signification, then, which I have thus accorded to the Rose, of typifying "supremacy and perfection, chiefdom and eminence," is one that must find a confirmation in every intelligent mind. There is a curious passage in the second book of the "Erotics" of Achilles Tatius, describing the loves of Clitophon and Leucippe, which happily supports my views—
 εἰ τοῖς ἄνθεσιν ἤθελεν ὁ Ζεὺς ἐπιθεῖναι βασιλέα, τὸ ῥόδον ἂν τῶν ἀνθέων ἐβασίλευε. γῆς ἐστὶ κόσμος, φυτῶν ἀγλαΐσμα, ὀφθαλμοῦς ἀνθέων, λειμῶνος ἐρύθημα, κάλλος ἀστράπτων. ἔρωτος πνέει, Ἀφροδίτην προξενεῖ, εὐεϊδέσι φύλλοις κομᾷ, ἐκκινήτοις πετάλοις τρυφᾷ. τὸ πέταλον τῷ ζεφύρῳ γελᾷ. "If Jove were desirous of placing a lord over the parterre, surely the Rose would king it among flowers. It is the ornament of the earth, the beauty of plants, the beloved (literally, the eye) of flowers, the blush of the meadow, dazzling in its loveliness. It breathes Love, it invites Venus, it is tressed in beautiful leaves; it luxuriates midst the trembling foliage, and its petals laugh in the zephyr."

I have already remarked, that this Rose (fig. 1. "a.") (which it will be particularly noticed is meant for a wild or dog Rose) was found in a position that left no doubt of its being typical of supremacy; for it is placed (characteristically) over the head of a figure holding the umbrella, an insignia of royalty and supremacy, among all nations under the sun, (or more correctly perhaps in proportion as they were under sun) and crowned likewise with the tiara of chiefdom, the prototype of that which we find adorning the head of images of Siva, and of which a representative has descended to the present day, and is used in theatrical performances in Burmah and Arracan, as the head covering of kings and princes. Thus the whole figure may be read, 1st, from the insignia in its possession to have been a royal personage; 2ndly, to have been a *Boddhihatwa*, from the Rose typical of that grade being placed characteristically over its head. It is thus I consider it to be meant for a representation of Gaudama when he was on this earth, but previous to his being imbued with the Boodhic spell. This mode of placing an object over a figure to characterise it, is found abundantly in antient Sculpture. Thus we see the five-rayed

Star of Destiny, of which we have spoken so often, placed over the head of a figure, (fig. 8.) representing that Deity. The Rosette likewise forms an expressive ornament of the most important portion of the clothing, in fact of the badge of the modern mysteries.

A circumstance to be noticed in this figure is, that the ears are represented with the lobes pierced, and filled with small cylinders, by which the bottom of the ear is brought nearly as low as the shoulder. This is a peculiarity that exists in all Boodhist figures throughout India, and is a fashion that still prevails in India beyond the Ganges, and in those mountainous ranges where Braminism has never obtained. It is most probable that this custom was adopted from the traditionary belief, that the ears of Gaudama were so formed; for we find it recorded of that god in Boodhist scriptures, that his stature was eighteen cubits; and that the lobes of his ears rested upon his shoulders. This mode therefore of piercing, and loading to distention, the lobes of the ears, appears to have been adopted in remembrance of that divinity, and to have deserted the plains of Hindostan, and to have taken refuge in farther lands, and inaccessible recesses together with that worship of which it was one of the accompaniments.

• Before bringing my communication to a close, I must refer to one other architectural ornament, a portion of which is found as a very abundant symbol on Boodhist coins; I allude to the so-called Rose Ornament on the Corinthian Abacus, (fig. 9). There, however, can be no mistaking the flower to be a representation of the Helianthus, or sun-flower, which appears in this instance to have been employed to symbolise the Sun; for from it proceeds a vivifying ray which terminates in a triple head.* This flame-shaped symbol, but without the triple head, is found on Boodhist coins, (fig. 10). No definite meaning has been given to it. Marsden declares it not to be the representation of a "flame," but of the conch sacred to Vishnu; but Boodhism holds nothing of that god. Its character however is sufficiently determined, from the circumstance of its being found in identically the same form

* It is singular that this might almost express the amount of the knowledge, which moderns have arrived at of the components of the Solar ray being three; the illuminating ray, the heating ray, and the chemical ray. It is not, I believe, yet satisfactorily settled whether there is not a magnetic ray. The other three are, however, acknowledged.

on the hieroglyphic sculptures of Egypt; sometimes by itself, sometimes rising from a sort of lamp, or cresset, (fig. 11). Champollion mistook it for a "tear" (Ἑῖ ῥῥ ε), and therefore consigned to it, in his phonetic system, the power of an "R."

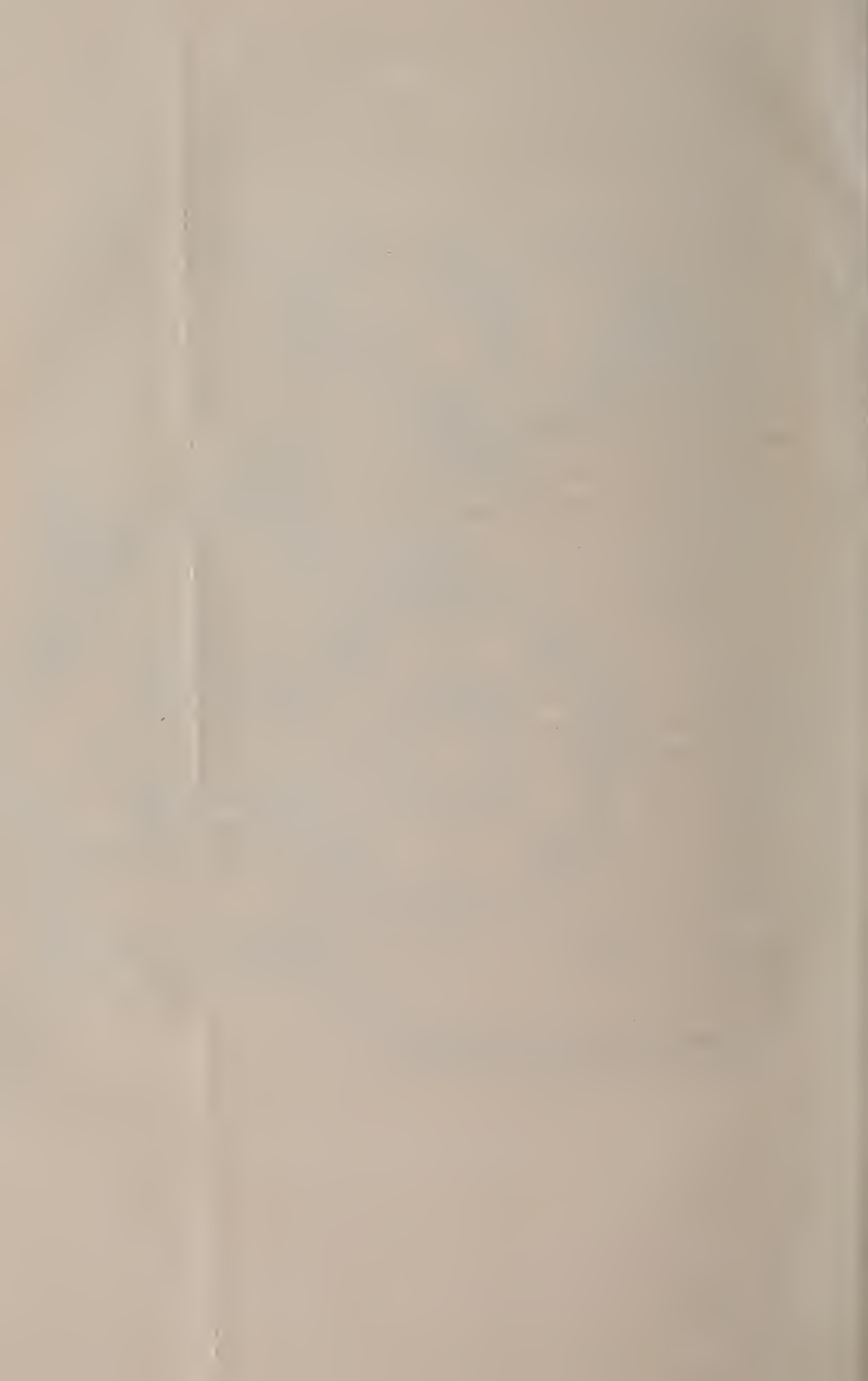
There is another symbol of frequent occurrence on Buddhist coins, especially on the one which you did me the favour of submitting to my inspection, and of which a description and explanation has appeared in the *Journal of the Society*. I give a representation of that side of the coin on which that symbol occurs, (fig. 12). In the paper alluded to, I declared that to a person acquainted with Buddhist cosmology, there could not be the slightest doubt, but that the whole of that side of the coin was intended as a symbolic representation of former universes in general, and of this universe in particular. And I moreover declared, that although I could not give any definite interpretation to the symbol occupying the centre, shewn detached at fig. 13; yet that from its relative position, and granting that my interpretation of the rest was correct, there was no doubt in my own mind that it was meant to represent this world in particular. I am glad to be able to say, that the whole of my views in reference to that coin, have since met with the valuable acquiescence of a friend, (Captain Phayre, Assistant Commissioner of Arracan,) who is not only deeply read in Buddhist literature, but has likewise an extensive collection of these coins. It is singular, however, that the following simple interpretation of that symbol, should not have occurred to me at the moment. We know that among the cabalists, as well as among others whose systems originated in the same source, the triangle with its apex upwards typified "fire," as did that with its apex downwards, "water." In the antient system of ideographic representation, when an object was represented repeated more than once, it signified "plurality, reiteration," in reference to that object. Now the two sets composing this figure are so represented, with their points meeting in a circle, (the universe), having a point within it (this globe); thus symbolising the reiterated effects of fire and water upon this mundane universe; which agrees exactly with Buddhist cosmology; for according to it this world has continually been alternately destroyed by fire and water; whence its Pali name *lāṅgā*, from *lāṅ*, "reiteration, to be again and again."

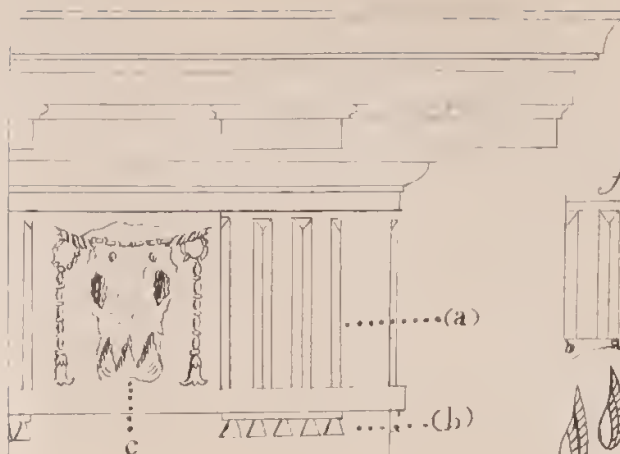
Yours faithfully and truly,

THOS. LATTER.

P. S.—Since writing the above—on shewing my explication of the side of the coin above referred to, and especially of the central emblem, to an intelligent Boodhist priest, he was much delighted with, and acquiesced in, it. On being asked what he had hitherto considered the central emblem to have referred to, he replied; “to the *Rajpaleng*, or throne, on which Gaudama was impregnated with the Boodhic spell.” On being pressed for his reasons, he said, “because it bore a resemblance to that species of foot-stool, called a drum *Morah!*” It is thus, that a somewhat similar shaped figure has been so employed in the pictorial representations of the life of Gaudama. With reference to the Rose-shaped Ornament discussed, I may be accused of a botanical inaccuracy, as the number of petals in the species *Rosa arvensis*, and *Rosa canina*, are “five;” whereas that of those in the representation on the sculpture are “eight;” but to this I attach but little importance: 1st, because the whole appertains to a rude, and inaccurate age; and 2ndly, because it is peculiarly the genius of the Burmese language to style, and consider as a Rose, any rosi-form flower. With reference to the Dentals: they appertain, I believe, principally to the Ionic order, and are of rarer occurrence in the Doric. In the secluded locality from which I write, I have no means, in order to determine their proper number, of consulting any standard works on the subject; but in the case of modern buildings of a public character, I do not remember to have met with any other number than “five.” I may as well mention, that the present is not the only instance in which the Rose forms an ornament in Boodhist architecture; they were found in abundance in various other Boodhist cave temples, which I visited in old Arracan Town. I was likewise informed by a friend, who had visited most of the cave temples of Western India, that the Rose is found alternating with a horse-shoe device, and with a tiger’s head; and others, as ornaments on the friezes of those reliques.

fig 1.





B (fig. 2.)

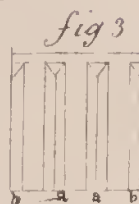
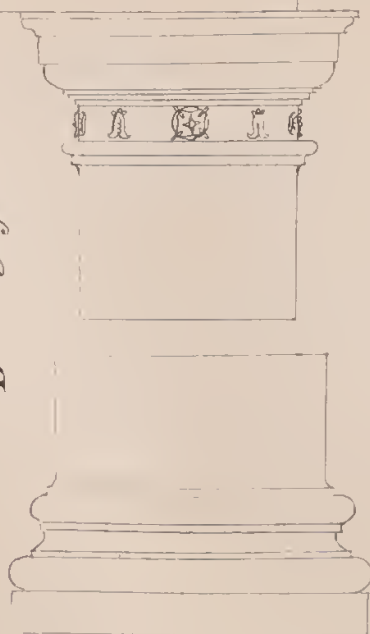


fig 6

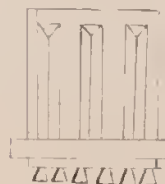
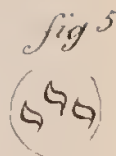


fig 7



fig 9



fig 10



fig 11



fig 8



fig 12



fig 13



Notes, chiefly Geological, across the Peninsula from Mangalore, in Lat. N. 12° 49', by the Bisly Pass to Madras, in Lat. N. 13° 4'. By CAPTAIN NEWBOLD, F. R. S., M. N. I., Assistant Commissioner, Kurnool.

Mangalore, the civil and military head-quarters of South Canara, and a seaport of considerable traffic, stands on the Malabar, or Western coast of India, in Lat. 12° 49' N., Long. 75° 0' E.

It is situated on a sort of peninsula or tongue of land between two rivers, which unite in its front in an extensive backwater, or lagoon, almost shut out from the sea by a long narrow bank of sand. There was formerly a deep opening on this sandbank by which ships could enter the sheltered waters of the lagoon after being lightened of their cargo; but its depth has been considerably lessened by the formation of another opening. The Coast patamars and Arabian buggalas can still pass into the lagoon with safety.

The rivers are navigable for country boats nearly to the foot of the ghauts, and form advantageous channels of commercial communication with the interior. The principal exports are to Surat, Bombay, the ports on the Malabar Coast and Arabia, and consist chiefly of rice, betel-nuts, pepper, cardamoms, cassia, sandal-wood, turmeric, and salt-fish. The chief imports are cloths from Bombay, Surat, Madras, Bellary, Bangalore, and Cuddapah.

The higher parts of the peninsula present a thick bed of laterite, intersected by small flat-bottomed vallies opening out towards the sea, and flanked by steep hills of laterite. The summits of these hills are usually flat, like those of trap or sandstone, with steeply sloping sides and occasionally precipitous cliffs. In structure the laterite is porous, and sometimes cavernous. Dr. Herklots, in his Account of Mahomedan Customs, describes the sacred shrines of Shaikh Fureed at Cuddry, about two miles from Mangalore, as being situated in a cave in a centre of a perpendicular rock composed of laterite which is said to lead all the way to Hyderabad, 450 miles! The extent, which cannot be very great, has not yet been ascertained.

Arcola, or Feringhipett. From Mangalore by Cuddry Devasthanum, and Koonoor to Arcola, about nine miles, the road lies over laterite, and lateritic gravel. About two miles on the east of Mangalore, on a

laterite hill in mid air was swinging (June 16th 1837) the decomposing body of the rebel, Bungar Rajah—the gibbet creaking in the wind. His predecessor had been hanged by Tippoo for *his loyalty to the English!* Arcola stands on the North bank of the Comardaire, or Southern Mangalore river, and is called Feringhipett, from the circumstance of its being the early residence of the Concan Catholic Christians under the protection of the Sekeri Rajahs, and who were latterly expelled by Tippoo when he destroyed the town. The remains of the old church stand on the hill, built in the usual massive Portuguese style. The tide is said to come up to this place.

Buntwal. Buntwal also lies on the N. bank of the S. Mangalore river. The country between this and Mangalore is hilly, composed of small hills and vallies watered by rivulets. Where rice cultivation does not prevail, the surface is covered with scattered brushwood and palm trees. The soil is red and lateritic. The hills are generally rounded, or run in the flat-topped, crescent-shaped curves, like those near Capergode. All that I had an opportunity of examining were of laterite; but hornblende rock containing a dark foliated mica, is seen in angular blocks in the bed of the river at Buntwal. The river here is apparently from 150 to 200 yards broad, and now (June 1837) unfordable. Native boats of considerable size ascend the river from Mangalore; Buntwal and Pani Mangalore being the principal entrepôt with the interior. The masses of rock in the river bed are considerable impediments.

In Buchanan's time (1801) Buntwal contained only 200 houses, but then it had suffered from the forays of the Coorg Rajah. It is now (1837) said to comprise 800 houses, inhabited chiefly by Moplay merchants, Concanis, and a few Jains. It is also capital of a taluk, with a population of about one lac, and a revenue of nearly two and a half lacs of rupees.

That curious sect the Jains, have a *busti* here. The charred rafters and roofless walls of many of the houses attest the ravages committed in the insurrection just quelled, (June 1837).

Uperangady. From Buntwal easterly, as the ghauts are approached, the surface of the country becomes more jungly, less cultivated, and less populous: the formation still laterite, covering granitic and hypogene rocks, which are occasionally seen in beds of rivulets and low

situations. The road still lies along the N. bank of Comardairi, or S. Mangalore river, which just below Uperangady bifurcates: the north stream descends the ghauts in the vicinity, and the south stream rolls down the steep of the lofty Subramani. The former is crossed to the village, now (June) unfordable.

Across this ford a dash was made on the insurgents by Colonel Green's force, the pagoda fired, and the principal idols defaced and broken; nothing remained but the tiled porticos and blackened walls. The natives were carefully collecting the fragments of their desecrated gods, and piling them up in the best order they could. The village is large and populous, and contains besides Brahminical temples, a mat'h of the *Jungums*, priests of the Lingayet sect, and a Jain *busti*.

Cuddab. From Uperangady to Neranky, and thence to Cuddab, the surface becomes more rugged and hilly, and the jungle, which is said to be infested by elephants and tigers, higher and thicker. The road leaving the northern branch approaches the southern, or Subramani branch of the river. One of its tributaries, the Dhillampari, is crossed by boat to Cuddab, a village containing many Concani Brahmins, with Goadabs, Tulavas, Bunters, Walliars and Jains, the last of whom have a *busti* here. I could scarcely find food or shelter, the shops and Traveller's bungalow having been burnt by the insurgents. The Bungar Rajah was, I believe, captured near this, in the house of a Jain. The geological formation continues much the same as on the last march.

Bottom of the Bisly Ghaut. The road to Culgund lies over hilly, jungly ground. Two small tributaries to the Subramani river, the Bilola and Cuddoo, are crossed; both fordable, though the monsoon rains are now descending literally in torrents, and the rocks and precipices alive with leaping muddy rills. The jungle leeches were here equally alive, and vigorous in their insidious attacks, and before I was aware of their presence, had nearly fainted from loss of blood with which my shoes were filled.

The first sensation is that of itching; and, in withdrawing the hand from relieving that sensation, the traveller finds it covered with blood. In a state of fasting this animal is rarely more than an inch long, and hardly so thick as a small fiddle string. It has evidently keen powers of scenting blood, and if the traveller stop but momentarily in the road, they fasten on him in astonishing numbers, raising themselves on their

tails to strike like so many little *cobra de capellas*. Until gorged with blood, they move in this way with considerable rapidity. I have only found them troublesome during the monsoon, when the paths and trees are dripping with rain. In the dry season they retire to the marshes and other moist situations. Dr. Davy describes a similar sort of jungle leech in his *History of Ceylon*,* and says that their bites have in too many instances occasioned the loss of limb, and even of life. He mentions various remedies, but I found the best was to wash the leg with tepid water at the end of the march; rest it, and to avoid, above all things, scratching the bite. In case of a wounded vein, burnt rag may be applied to stop the hæmorrhage.

Culgund is a revenue choukie; contains about thirty or forty houses chiefly of Goudahs, Komtis, and a few Attiah brahmans; and was lately occupied by the insurgents under Appiah, Mallepa, and Timmapa Goudah, who were however soon dislodged by Colonel Williamson's force, which marched down the Bisly Ghaut from Bangalore.

About two miles from Culgund I crossed the Udhulla stream, which was then running with frightful velocity, on a rude raft hastily constructed on the spot of a few green bamboos lashed together.

The sand of this stream abounds in bits of garnet, quartz, and fragments chiefly of hornblendic rocks, which now become the principal surface rock, though covered by thick beds of red clay into which the hornblende schist passes by weathering. Laterite is now seen less frequently, as the ascent of the ghauts commences at the bottom of the Bisly Pass, about one mile from Udhulla.

Ascent of the Bisly Ghaut. The ascent lies up a transverse break in the lowered prolongation of the ghauts, immediately to the north of the mountain Subramani, and for some distance along the right bank of the Subramani river. This sacred mountain is the highest peak in this part of the ghaut chain, though only rising, it is said, to the elevation of 5611 feet above the level of the sea. Its summit was concealed in monsoon clouds, but its bare shoulders of grey granite rise in a magnificent sweep from the green forests which mantle its back, and fringe its base.

After leaving the river bank of the stream, the road leads for four miles up the steepest part of the Pass, relieved here and there by short

* *Travels in Ceylon*, pp. 103 and 104.

flat steps, or terraces, till the summit is attained ; when the route lies along a cross valley having high hills on both sides, round the bases of which the road winds for some miles to the clear table-land of Mysore, where the land subsides in long gentle swells covered with delicious verdure, and the dense jungle breaks in plantation-like patches, and umbrageous clusters of noble trees. In the gorge of the Pass lay the broken barricades of the insurgents.

At the western foot of the Pass, and along the base of the Subramani, hornblende rock, containing garnets and dark-coloured mica, occurs, with veins of a very large grained granite composed of white quartz, red and white felspar, and silvery mica in very large plates : gneiss is seen on the steep face of the ghaut, and hornblende rock often coated with the red clay, and its own detritus. This formation continues to the summit of the ghaut.

Uchinghy. The formation here is generally gneiss. One of the hills of this rock is crested by hornblende rock in large prismatic masses. Patches of laterite occur, covering these rocks in various localities, and a few bosses of granite.

Kensum Ooscottah. This village is fairly on the table-land : near it I crossed the Hemavatti, one of the principal tributaries to the Cauvery, in a canoe. It is about fifty paces broad, with steep banks of clay, silt, and sand with mica. Near a temple to the Lingum in the vicinity of the village, mammillary masses of gneiss project from the red alluvial soil. This rock has here lost much of its quartz, and is of that variety of thick bedded gneiss which, in a hand specimen, might pass for granite ; the felspar is often of a reddish tint. Laterite is found in this vicinity a little below the surface in a soft sectile state.

The face of the surrounding country is diversified with low-rounded hills, often covered with a red clayey soil, which yields during the moist months a verdant carpet of short grass.

Springs of good water are found at depths of from twelve to eighteen feet below the surface. Rice and raggy are the staple articles of cultivation.

Ooscotta comprises about one hundred houses, inhabited chiefly by Lingayets and a few *Carnati* brahmans of the Smartal and Sri Vaishnavam sects, and a few Dewangurs.

A solitary Sri Vaishnavam brahman resides in the fort. The fort is said to have been built or greatly improved by Hyder, but is a place of

no greater strength than the ordinary second class ghurries of S. India. It contains two temples, one dedicated to *Iswara* and his consort *Parvati*, and the other to *Angini Dewi*. There are two others in the Pettah, to *Angini* and *Buswunt*. The staple articles of cultivation are rice and raggy.

Pallium. The road from Kensum Ooscotta into Mysore, lies over an undulating country, on the surface of which the dwarf thorn and aloe begin to be more thickly sprinkled than nearer the ghauts. Gneiss still outcrops in mammillary masses from a reddish alluvial soil. Here is a Jain temple to *Pursonath*, and an old pagoda to *Jinadur*. There are several Jain families still residing here. Some miles to the N. is the famous ancient capital of Hallibede, where there are some Jain *bustis*. Most of the inscriptions I have had copied.

Hassan and Gram. Gneiss and hornblende schist are still the prevalent rocks. Talc slate with layers of a fine greenish potstone interstratified also occurs, of which the elaborately carved walls of the temple to Keysu Dev, are constructed. At Hassan there is a large fort repaired by Hyder and Tippoo, with a glacis, covered way, dry ditch, and a sort of *fausse braye*; also a Jain temple to *Pursonath*. Gram is also defended by a fort of no strength, and of considerable antiquity: it is quadrangular, and has square towers connected with a high stone curtain and a mud parapet, the whole surrounded by a dry ditch. It occupies a slight ascent. The mica in the gneiss near Gram is sometimes replaced by talc, and passes into protogine.

My attention in this part of Mysore was often attracted by heaps of stones near the road side to which, as I have seen in Catholic countries on spots where murders have occurred, the passers-by each added a stone. From some of these, half-eaten portions of the human frame often protruded, dragged forth by the hyænas or jackals. On enquiry I found they were the remains of the cultivating caste, called the Wokeligars, who, if they happen to die of a sort of leprosy called "*Kor*" or *Thun*, are not suffered by the Brahmins to be buried below the ground in the ordinary way, "lest no rain should fall in the land"!

Chinrayapatam. After exploring the Corundum pits of Golushully, &c. (described in the Journal Royal Asiatic Society, No. XIV. p. 219) I passed through Kulkairy to Chinrayapatam, and thence by the Corundum localities of Appanhully and Barkenhully to Hirasaye, Cudhully, and Belloor to Ootradroog, granite, protogine, gneiss, talcose, and horn-

blende schists, penetrated occasionally by trap-dykes, constitute the formation, overlaid here and there by patches of laterite or kunkur, on which rests the surface soil. The latter is usually reddish and sandy. Sometimes these deposits are wanting, when the substratum consists of the gravelly detritus of the subjacent rocks. At Belladaira a large bed of ferruginous quartz occurs. Country bare looking.

Chinrayapatam was anciently a Hindu town of some importance, and governed by a Bellala prince. There is still a *busti* here to the 24 Pir-thunkars. The fort was greatly added to by Hyder and Tippoo; but after all is of no real strength. The Hindu sculptures in the interior are for the most part executed in the potstone of the surrounding formation. Inscription on stone, dated 1400 A. S.

Ootradroog. The mass of granite on which stands the Droog or fortress, is somewhat saddle-shaped, and runs nearly N. and S., it terminates abruptly at either extremity. The northern extremity, crowned by the citadel, is a sheer scarp of rock nearly 200 feet high: its base is rugged with large precipitated masses. The southern extremity is also fortified, and the two forts are connected by two walls running along and enclosing the entire length of the ridge on which stands the remains of a small village.

From the top is a fine view of the peak of Sivagunga, the highest in Mysore (4600 feet); and of the great rock of Severndroog. The granite is similar to, but less porphyritic than, that of Severndroog.

Ootradroog was stormed in 1791, by Colonel Stuart, just previous to the first siege of Seringapatam.

Severndroog. From Ootradroog I proceeded to Maugri, which has a handsome pettah, originally built by Kempye Goura, the founder of the fortress of Severndroog; and thence ascended the stupendous mass of granite on which stands the small pagoda and fort of Severndroog. The country for a considerable distance is wild and woody, abounding with low hills and rocks, among which a porphyritic granite prevails. The intervening vallies watered by the Arkawati and its tributaries, are in general well cultivated. A magnetic iron sand is found in the beds of almost all the rivulets, and smelting furnaces are numerous throughout this romantic tract.

The base of the great porphyritic mass of Severndroog is surrounded by tall forest trees, below which grows an underwood in which the

bamboo flourishes in great luxuriance. A deep ravine, forming a nullah bed, affords a convenient shelter for the wild beasts which infest it. Not far from the place where we crossed, I observed a capacious tiger-trap. The place has been nearly deserted since it was stormed by Lord Cornwallis in 1791, from the deadliness, it is said, of the climate; caused most probably by the decayed vegetation of the surrounding jungles. It is said that the clumps of bamboos were planted purposely to render the place as unapproachable as possible; but the bamboo, from the nature of its growth, is a tree little likely to be selected by natives for this purpose.

I ascended the rock from the north-east side. The major axis of the mass runs nearly east and west, and is crossed at right angles by a profound fissure which cleaves the rock from summit to base into two distinct portions, both fortified, so as to be independent of the lower fort, which is extremely extensive, and vulnerable at many points. After the breaching of this outer wall the garrison, panic-struck, fled to the citadel, or Bala Hissar, on the summit of the western rock, which was deemed impregnable: but the troops in the heat of the pursuit, entered the gates with them, and in one hour gained possession of the place. The assault was made from the N. E. side. Tippoo, after the peace in 1792, regained possession, and added considerably to the lower works in the construction of batteries commanding the former line of attack, one of which goes by his name; another by that of Hyder, while a third is expressively styled the *Shaitan*, or Devil, battery.

The western rock, called by natives "*Billaye*," from the light colour of its surface, which I found was caused by a species of lichen, terminates to the westward in a lofty precipice, down which many of the terrified garrison threw themselves. On it stand the ruins of Tippoo's mosque, a powder magazine, and a few other buildings.

The western rock is called *Kari*, from its dark rusty aspect, caused by the weathering of its surface, and the oxidation of the iron in its mica and hornblende. Why the whole rock should be called Subarna, or Golden, the native guides could not inform me. It is entirely composed of a granite, which from small grained may be seen passing into the large grained and porphyritic varieties. Some of the crystals of reddish felspar on Kari durga, were nearly two inches long, imbedded in small grained reddish granite.

On the rounded pinnacle of a magnificent conoidal mass of this porphyritic granite overlooking the whole rock, stands a small, but picturesque temple to Busuana.

I descended by a deep fissure in the rock to the temple at the S. E. base, where some Brahman priests and their servants still remain. Here may be traced the vestiges of the old gardens of the Poligar builder of the fort—Kempye Goura.

Along the North base are a few caves formed by the covered spaces between large granitic blocks. I regret being unable to get a specimen of the *Shin-Nai*, or red dog, which Buchanan heard was to be found in the forests of Severndroog, and which is said to kill even the tiger by fastening itself on its neck.

The *Shin-Nai*, Buchanan says, is quite distinct from the wild dog, which is said to be very common here. The forest abounds with good timber trees, most of which Buchanan describes, and among which may be enumerated the sandal-wood.

Iron furnaces. I have previously mentioned that a magnetic iron-sand is found in great abundance in the beds of the rivulets of this hilly tract. Furnaces for smelting it are said to exist at Hurti, Kunchakanhully, Timsunder, Naigonpully, Ittelpully, and Chicknaigpully. I visited those of Kootul, (or Cotta,) of which a description will be given hereafter. At Ghettipura, in Tippoo's time, steel is said to have been made.

Taverikairy. From Kootul the Arkawatty river is crossed: country undulating, and rocky; for the most part uncultivated, and jungly. The principal rock at Taverikairy is gneiss, with fragments of iron shot quartz, green actynolitic quartz, felspar, fragments of hornblende, schist, gneiss, granite, and basaltic greenstone scattered over the face of the country, and occasionally patches of kunker.

Bannawar. Near Bannawar I found diallage rock projecting in large, angular, scabrous blocks, from the top and sides of a low elevation. The great mass of the rock was chiefly white felspar and quartz. The crystals of diallage were well defined, and passed from dull olive-grey shades, to the lively decided green of smaragdite. There was more quartz in this diallage rock than is seen usually in the euphotides of Europe; and the external aspect of the blocks was almost trachytic in its roughness. Not far hence, the gneiss, with which the diallage is

associated, apparently as a large vein, loses its mica, which is replaced by minute silver scales of graphite.

Nodules of lateritic iron ore occur, scattered with fragments of iron shot quartz, a greenish actynolitic quartz and felspar; fragments of hornblende, schist, gneiss, granite, and basaltic greenstone, scattered over the face of the country; and occasionally patches of kunker.

Bangalore. Gneiss is the prevalent rock about Bangalore, penetrated by dykes of basaltic greenstone, and occasionally by granite, as is seen near the pettah, and adjacent fields. The granite in these localities splits into the usual cuboidal blocks, or exfoliates into globular masses. It often contains hornblende in addition to mica.

The gneiss strata though waving and contorted, as seen in the rock in the middle of the tank near the Dragoon barracks, have a general N. and S. direction, and often contain beds of whitish quartz preserving a similar direction. The strata are nearly vertical.

Approaching Bangalore from the west, a bed of laterite is crossed, forming a hill on which stands a small pagoda. This bed extends northerly in the direction of Nundidroog, where laterite also occurs.

In other situations, covering the gneiss and granite, a reddish loam is usually found, varying from a few inches to twenty feet in depth, containing beds of red clay used in making tiles, bricks, &c., the result evidently of the weathering of the granite, gneiss, and hornblende rocks.

Colar. A similar formation continues to Colar, a small fortified town, notorious for its breed of vicious horses, and for being the birth-place of the celebrated Hyder. It lies about thirty-eight miles to the E. N. E. of Bangalore. The gneiss is occasionally interstratified with beds of hornblende schist.

The hill to the N. of the village, on which stands the ruined fort of Aurungzebe's General, Cassim Khan, breaks the monotony of the surrounding table-land. A spring and a small patch of cultivated land on this eminence, probably tempted this Mahomedan noble to make it his temporary residence.

Baitungalum. Granite, gneiss, and hornblende schist are the prevailing rocks. Benza was inclined to believe that the blocks of granite seen in the plain, a mile or two west of this place and north of Golcondapatnam, are erratic boulders; but, after careful examination, I am

inclined to believe they are *in situ*, or very nearly so, and are merely rounded by the process of spontaneous concentric exfoliation elsewhere described. They are outgoings of great granite veins or dykes in the gneiss.

About eight or nine miles east of this, the Mysore frontier is crossed into S. Arcot. Kunker occurs on the banks of the rivulet near the village, both on the surface and in a bed below the alluvial soil. Efflorescences of muriate of soda are also seen in the vicinity.

Baitmungalum lies on the eastern flank of the gold tract which, according to Lieut. Warren, who examined this district in 1802, extends in a N. by E. direction from the vicinity of Boodicotta to near Ramasundra. The gold is distributed in the form of small fragments and dust throughout the alluvium covering this tract.

At Marcupum, a village about twelve miles S. W. from Baitmungalum, are some old gold mines, worked by Tippoo without success. The two excavations at this place demonstrate the great thickness, in some parts, of these auriferous alluvia. They were thirty to forty-five feet deep, respectively. The following is a list of the layers cut through.

First mine.

1. Deep brown earth, $1\frac{1}{2}$ ft.
2. Grey argillaceous earth with gravel.
3. Deep brown earth, (No. 1.)
4. Hard grey and yellow clay.
5. Hard whitish argillaceous earth.

Second mine.

1. Three feet of a black argillaceous earth with gravel.
2. Dark brown earth with stones.
3. Hard clay streaked black and yellow.
4. Hard large black stones, argillaceous.
5. Black earth with gravel.
6. Hard black clay.

The stones found in the hard whitish earth, No. 5, of the first mine, are described as of a siliceous nature, colour black, changing to a deep rust-colour where they seem to decay: a few parallel streaks, about which adheres a green and yellow substance, mark their value to the native miners.

The metalliferous stones in the second mine differ from the above, as they also differ in the matrix. They are of two kinds, viz. 1st, hard, black,

and argillaceous; and 2nd, hard, white, and siliceous. A deep orange soft substance adhering, marks their value. This substance appears, however, to be superficial, marking the surfaces into which the stone splits on being struck.

Lieut. Warren noticed that a sort of red earth, generally two feet deep, and succeeded by a white calcareous earth of equal depth, the under stratum of which consisted of large white decayed stones, seldom failed to contain an ample proportion of metal. The average proportion of gold to earth is as one grain of the former to 120 lbs. (avoirdupois) of the latter.

There can be little doubt that the auriferous black and white stones are fragments from the gneiss, granite and hornblende schist, which base this auriferous tract, and constitute the singular ridge which runs through it in a N. and S. direction, and which may be regarded as having furnished most of the materials of the reddish alluvium on its east and west flanks, and therefore as the true matrix of the gold. The orange-coloured stones I found to be caused by the oxidation of the iron in the mica.

Lieut. Warren had this alluvium washed and examined in various places throughout the gold tract, and points out as the most promising localities,—the Baterine hill and its vicinity N. of Dasseracotapilly, Corapenhully, Shapoor, Buksagur on the S. bank of the Palaur, five miles E. from Baitmungalum, Wurigaum, in a thick jungle W. of the village, which is situated about ten miles S. W. from Baitmungalum.

The process of extracting the ore from the stones is simply by pounding them, and washing the powder in water: the gold-dust sinks to the bottom. An equal proportionable quantity of gold is extracted from the powdered stones as from the earth.

The gold-dust obtained yielded on assay at the Company's mint, 94 per cent.

This auriferous range on the table-land of Mysore, may be traced to the eastern ghauts; southerly, by the hill fort of Tavuneri, to the S. of Caveripatnam mutta in the Amboor valley. Two Passes, however, break its continuity near Tavuneri.

To the N. it appears to terminate at Dasseracotapilly; though the line of elevation, taking a gentle easterly curve, may be traced by the outliers of the Baterine hills; Auminiconda or Awnec, Moolwagle, Co-

roodoomulla, Rajeegoondy, to Ramasundra in the Cuddapah collectorate, a little W. of Panganores.

Vencatagherry. This is the first march from the frontier into N. Arcot. The formation is similar to that of Baitmungalum; but granite (the grey variety) is more prevalent, and the quartz more impregnated with iron. Magnetic iron sand is procured and smelted in the vicinity. It is found as usual mingled with quartz sand in the beds of streams which have their rise among the hilly tracts.

Naikenairy. A small village, formerly under the Poligar, situated at the top of the Pass to which it gives its name, and which leads down the ghauts to the plains of the Carnatic.

Evident marks of the great disturbance and dislocation suffered by the strata are visible in the rugged physical aspect of the country to the eastward, and further confirmed in examining the sections of the rocks, whose layers are found broken, on end, vertical, and at various other degrees of inclination down to the horizontal.

The grey granite which chiefly composes the ghauts here, is a compound of white felspar, quartz, dark green mica, and hornblende. The mica is sometimes seen in round nests as large as a man's head, which in weathering fall out, leaving corresponding cavities in the rock. These are seen in the faces of some of the precipices, and impart the appearance of having been caused by cannon-shot. Iron ore, and quartz impregnated with iron, are found in considerable abundance. Veins of quartz are common, also of reddish foliated felspar, either alone or with quartz, often coloured of a lively green by actynolite. When these three minerals are combined, the structure of the mass is not unfrequently porphyritic; small cavities lined with an orange-yellow powder are seen in the red felspar, also a micaceous brilliant metallic powder first noticed by Benza, and which he seems to think is cerium, but this idea has not yet been confirmed by chemical analysis, which is a desideratum.

The descent of the ghauts here is steep and abrupt; and five miles and a half long from Naikanairy to the valley of Buttrapilly at the foot of the Pass.

The descents of the ghauts by the Mooglee Pass from Palamanair, and by that of Domaracunnama from Ryachooty, are by no means so abrupt or continuous as this: the formation is similar, but the ghaut chain is more broken.

From the base of the Ghauts by Lalpett to Arcot. From the base of the Ghauts by Lalpett to Arcot, the formation is similar. The bold ridge of Paliconda is chiefly of the variety of granite termed "Syenite," or a granite in which mica is replaced by hornblende, and in which usually a reddish felspar forms a prominent ingredient. Its structure in this mountain mass is both close-grained and porphyritic, and it is penetrated by several dykes of basaltic greenstone having a general N. and S. direction, but throwing off ramifications at nearly right angles. Eurite is met with in veins near the summit on which the pagoda stands. Dr. Benza appears to suppose the granite of Paliconda of posterior origin to that of the Ghauts; but as his opinion is grounded entirely on Lithological difference, and its association with eurite, basalt and porphyry, the age of which has not yet been determined, and which are moreover equally associated with the ordinary granite of S. India; we must hesitate before hastily admitting this hypothesis in absence of the other more decisive proofs of the age of Plutonic rocks derived from disturbance or non-disturbance of strata of ascertained age, with or without alteration, superposition, &c.

Poni. Near Poni, and Mymundeldroog a few miles to the N. E. of Vellore, granite still prevails, running in a broken chain of rocks up to Chittoor, and tilting up the hypogene schists. At Lalpett, between Poni and Arcot, is a ridge east of the Bungalow, having a S. westerly direction, and evidently an outlier of the great ghaut line of dislocation which sweeps in a curve from Naggery by Raj, and Chellempollium, to the Moogli and Sautghur Passes. The short ranges between Arcot and Vellore, those of Paliconda, Vanatedroog, and Javadie on the eastern flank of the beautiful vale of Amboor, are all equally subordinate to this line of dislocation. Through them by transverse gaps the Palaur, having traversed the longitudinal wall of Amboor, and the Poni, after having irrigated that extending from Chittoor to the N. bank of the Palaur, find their way easterly to the plains of the Carnatic.

The summit of the Lalpett ridge is crested with bare blocks of a dark massive hornblendic rock; but the great bulk of the hill is composed of gneiss penetrated by dykes of basaltic greenstone and granite, great disturbance in the strata is observable. Towards the N. extremity of the hill the gneiss is scarcely to be distinguished from the granite, except where large surfaces are exposed. The granite often passes into pegmatite. In some blocks I found the dull olive-green mica replaced

by a light-green translucent potstone, approaching *nephrite* in mineral character. This mineral also occurs in the hornblende rock in fragments, about a quarter or half an inch long, which frequently assume the rhomboidal form of felspar crystals, and give the rock the appearance of an elegant porphyry. At the exposed surfaces the softer potstone resists the action of the weather, more successfully than the harder imbedding hornblende paste, from which it stands out in relief. Blocks of it occur near the well in the tope close to the Bungalow, where it may be seen outcropping a prismatic or jointed lamellar structure. It is evidently a variety of protogine, and rare in Southern India. I recollect no published description of it.

The sections of the soil afforded by the wells here, show,

1st. Three feet of a layer of reddish brown sandy loam.

2nd. One to two feet, gravel, angular and from the ridge.

3rd. One to two feet weathered rocky detritus, and kunker occasionally.

Caverypauk. From Lalpett the road lies by the populous town of Wallajah-nugger, on the North bank of the Palaur to the Caverypauk. The ghaut elevations, and their subordinates, have now been left behind, and the plains of the Carnatic are in front varied only by a few low hills near Wallajah-nugger. Near Caverypauk the fine white kaolinic earth, decayed pegmatite, of which many of the Arcot goglets are made, is dug.

Sri Permatoor. After a day's examination of the temples and sculptures at Conjeveram, I reached this birth-place of the celebrated Brahman *Guru*, and founder of the Sri Vaishnavam sect,—Rama Anuja Achari,—who is supposed to have flourished in the eleventh century of the Christian era, and converted many of the Buddhists and Jains, who then constituted the mass of the population, to the Brahmanical faith.

At Conjeveram, I was waited on by a number of Brahmans of the Smartal sect, whose Guru is Sencra Achari, priests of the great temple to Siva there. They complained much of the higher amount allowed to the great temple of the Sri Vaishnavam, at Little Conjeveram, viz. 12,000 rupees per annum, while that to their own chief is only 2,000. This difference they say originated in the partiality shown for the Sri Vaishnavam sect by the Hindu minister of the then Nuwab of the

Carnatic, the famous Wallajah. The other sects of Brahmans prevailing here are the Telinghi, Madual, and Shaivum; and it is calculated that Conjeveram contains nearly a thousand families of Brahmans of the above five sects. Remnants of the old Jain temples are traceable in fanes now occupied by their fierce Brahmanical persecutors; and there is still one family of this sect living at Conjeveram, and a small *busti* or temple at Tripetty Goodum, a neighbouring village.

In the erection of the temples, the Hindu architects like the Egyptians, in the N. and S. disposition of their walls, appear to have gone by the polar star or the rising and setting of the sun, rather than by the magnetic meridian. In their tanks near the place I observed both the sacred lotus or Tamari (*Nymphæa Nelumbo*,) and the smaller lotus, (*Nymphæa lotus*) called by Tamuls, "*Alli*," with its flower of the richest and deepest pink, studding the surface of the clear water which is often completely carpeted with its broad peltate serrated leaves. The seed of this aquatic plant is eaten, and also its root.

Much of the grey granite used for the foundation and lower parts of the *Gopars*, *Vimanas*, and walls of the temples is, I am told, brought from the rocks of Sholingur, about twenty-five miles to the west by north, and from Tirvaloor.

Some large blocks of a bottle-green hornblendic rock, resembling that of the Palaveram hill, were brought from Pattamully coopum.

Astronomy, for which the Brahmans of Conjeveram and Trivaloor were once so famous, is now at a low ebb. The Joshi of Great Conjeveram is a Telinghi Brahman, named Yaikambria, who adopts the tables of the *Chandra Siddhanta* of Anáwa Ayenga, a Sri-Vaishnavam Brahman of Little Conjeveram; but the most celebrated Joshi lives at Caverypauk; he is a Brahman of the Smartal sect, named Rama Joshi. They calculate the movements of the heavenly bodies and eclipses for each year; the lucky and unlucky moments; and draw out written annual almanacs. But their principal occupation is astrology, calculating of nativities, horoscopes, &c.

Sri Permatoor. The plain around Sri Permatoor, as at Conjeveram, undulates slightly; and gradually inclines towards the sea coast, which is about twenty-seven miles to the eastward. The lower grounds are occupied by tanks, some of them of great size, as is the wet cultivation

they irrigate. The tank of Sri Permatoor is said to water 25,000 acres, chiefly rice-fields yielding two annual crops.

The higher grounds are often uncultivated, and covered with low bushes, chiefly of the dwarf date, (*Elate sylvestris*); the thorny *carais*, (*Webera tetrandra*); the fragrant Kellacheri; and the prickly pear, over which tower the stately fan-palm and cocoanut.

This maritime province of Chingleput, or "the Jaghire," the first ceded to us in S. India (A. D. 1763 by Nuwab Wallajah) has an area of 2253 miles; a revenue (chiefly derived from its wet cultivation, and the duties on salt manufactured on the coast) of nearly fifteen lacs of rupees, and a population of about 108 to the square mile.

The surface soil in the vicinity of Sri Permatoor is a sandy, reddish loam, overlying either thin beds of a loose coarse sandstone passing into white and ferruginous shales, laterite or kunker mixed with sand, or "*chikní muttí*," a tough greyish marl imbedding fragments of granite rocks, chiefly felspar. In digging for water near the village, the following is a list of the layers usually cut through.

1st. Reddish sandy loam,	5 feet.
2nd. Angular granitic gravel, granitic or lateritic, } mingled with kunker,	3 "
3rd. Chikní muttí,	4 "
4th. Loose sandstone,	4 "
5th. Sand,	2 "
	<hr/> 18 feet.

At Conjeveram the wells are much shallower, the bed of sand in which the water is found lies under similar layers of loam and *chikní muttí*, on an impervious bed of rock or clay. The Wudras tell me, there, that they never have occasion to dig down to the rock.

On the hard surface of the plain at Sri Permatoor are found, near the Traveller's bungalow, a few fragments of a hornblende rock resembling that of Palaveram, pegmatite, grey granite, a ferruginous hornblende rock, white and reddish shales with edges little worn, together with a few scattered pebbles, well rounded, of a compact reddish sandstone or quartz rock, exactly resembling that of the Naggery hills,

about fifty miles N. of this. It is very evident, from their rolled aspect, that these hard quartz pebbles have travelled, and been subjected to the action of water in motion; but whether they have been washed direct from the parent rock to the place we now see them in, or whether they were once imbedded in deposits of laterite on, or near the spot, and which have since been swept off, is uncertain. A little farther to the westward of the bungalow, the surface of the plain is strewn with the harder debris of a bed of laterite, a circumstance in favour of the latter hypothesis, and among which are rolled fragments of a chocolate sandstone, exactly resembling those found by my friend, Cole, in the laterite of the Red hills. Rounded pebbles of white and red ferruginous quartz are also scattered on the surface, and beds of a fine light-coloured sand, like that of the Egyptian desert, and evidently not the result of the disintegration of rocks *in situ*. In short, there is every appearance of this part of the Carnatic having emerged at no distant geological period from beneath the surface of the water.

From the little worn aspect of the fragments of the granitic rocks, and the softer shales, it is evident that these rocks are at no great distance hence *in situ*: accordingly I continued my search in the plain to the westward, and at length succeeded in finding the white shale *in situ* in the bed of a small stream which feeds the tank, and on its banks a light grey sandstone outcropping in the bed of a small pool; both rocks in horizontal strata, the sandstone overlying the shale. The sandstone is rather coarse or granular in structure, being composed of angular grains of greyish quartz held together by a white felspathic paste. In some excavations a little to the east of the bungalow, it passes both into a conglomerate imbedding small rounded pebbles of white quartz, and into a ferruginous sandstone resembling that imbedding silicified wood near Pondicherry. This sandstone, like the laterite with which it is associated, has evidently been broken through, and stripped off in many places by aqueous denudation, its strata being by no means thick or continuous.

It is found in the plain between Madras and Naggery in a more consolidated and compact form, and has been judiciously employed on account of its containing but little or no iron, by Lieut. Ludlow, in the construction of stands for the instruments in the Magnetic Observatory

of Madras. Its locality, according to native information, is about six miles and a half, E. by S. from Tripassore, a little N. of the Madras road, near the village of Permaul Naigpet. It here imbeds ferruginous reniform nodules, and a few pebbles of the older sandstone of Naggery, and makes an excellent building stone. Like the laterite, it is usually found occupying the higher parts of the undulations which traverse the plains of the Carnatic, in lines running parallel with the eastern ghaut chain, of which great dislocation they probably mark subordinate, synchronous elevatory forces. They are interrupted, usually, by transverse vallies, through which the great lines of drainage from the table-lands pass off to the sea.

I was unable to find the granite and hornblende rock in situ, but I have little doubt that they are to be found basing the plain.

Concretionary sandstone sometimes occurs in the loam and silt overlying the sandstone.

A little to the eastward of the bund of the tank is a bed of laterite similar to that of the Red hills, the extent of which I had not leisure to trace. It is used for making roads.

Poonamalee. Between Sri Permatoor and Poonamalee, north of the large Chumbrumbancum tank, a bed of laterite runs to the northward of the road, which in structure resembles that of the Red hills, and another is crossed, or a spur of this, shortly afterwards.

A third bed is seen between Poonamalee and Madras, near Nabob's Choultry. They afford good material for making and repairing the road, which has been taken advantage of. The laterite enters into the construction of the fort at Poonamalee and St. Mary's Church at Madras; the base of the pedestal supporting the Munro Statue, the construction of the public roads, &c.

At Madras the soil is sandy, overlying beds of a bluish-black clay interstratified with layers of sand and reddish clay, and occasionally a bed of angular granitic gravel. The whole rests on the solid granite rock.

Account (Part II.) of parts of the Cabool and Peshawar Territories, and of Samah, Sudoom, Bunher, Swah, Deer and Bajour, visited by Mulla Aleem-ulla of Peshawar, in the latter part of the year 1837. Arranged and translated by MAJOR R. LEECH, C.B. Late Political Agent, Candahar, under whose instructions the Tour was made.

“Moorcroft, Vigne, Burnes, Masson, Leech, and Wood, had travelled in the country, yet when General Pollock was at Peshawar and the Khyber closed, there was no trustworthy information to be procured regarding the Karifa, (Karapah?) the Abkhánah or the Tirah routes from Peshawar to Jelalabad.”—(Recent History of the Panjab, from the *Calcutta Review* for September 1844.)

“Of the Kohistan (Eesafzai), my information is, I must confess, very imperfect, and will be here limited to nearly a barren detail of names.”—(Captain E. Conolly, *Asiatic Society's Journal*, No. 105, 1840, page 929.)

“The much-to-be-regretted death of Doctor Henderson, has deprived us of authentic geographical knowledge respecting the valley of Suhát, Bonler, the valley of the Deer river, and the country of Bajáwar.”—(Vigne's *Cashmeer*, Vol. II. page 310, 1842.)

The author of the Recent History of the Panjab has gone considerably out of his way (even to the Haft kotal) to prove that every traveller across the Indus has failed both in his duty to his Government and to the geographical public, and seems to forget that a London publisher is not always the person to whom a Government servant should send surveys of Military Passes.

In justice to the late Cabool Misson of 1836-38, (two of whose members, Burnes and Lord, are dead, and a third, Wood, has retired from the service), I feel it a duty to record that before the advance of the Army into Affghanistan, Government was by the members of the Mission put in possession of surveys (made on horse and camel back) of the Khyber and Bolan Passes, and of that leading from Cabool viâ Bamian into Turkistan, and of accounts of all the other Passes leading from the Indus into Balochistan and Affghanistan, as well as of those leading from Cabool into Turkistan over the Hindoo Coosh. If the author of

the Recent History will refer to the published (not in Albemarle street) account of the Khyber Pass, dated Cabool, 1st October 1837, he will find the description of the three Passes of Tátára, Karapah, and Abkhánah thus prefaced:—"There are three other Passes, which are connected with this one (the Khyber), in as much as a simultaneous passage would most likely be attempted by an invading force through more than one."

The author of the Recent History also blames the natives of the country for calling the Pass, Haft kotal, and blames all Europeans for copying them.

While Darrah is a word applied both to a valley (Shahar Darrah, Shah Darrah), and to a defile (Darrah i Khyber, Darrah i Bolan), the word Kotal is applied to a ridge either rising from the plain or to the surmounting ridge of a Pass; and the Pass that puzzled the wide-awake author of the Recent History, the "Daylight Traveller," to account for its name, is called Haft kotal, or seven ridges.

It is a pity, however, that the natives were not taught by our Recent Panjab authority to call it Haft kotalak, and that Europeans were not taught to translate it the seven paslets, and this new-coined word might be entered in the dictionaries in which Kotal is not to be found opposite to Kotalak.

The word for a ridge must not be confused with the one for a spare horse led in state before a chief. I hope the author of the Recent History of the Panjab will next give us the Recent History of the Protected Sikh States, and in the Preface parody the above quotation thus—

"* * *, * * *, * * *, * * *, * * *, and * * * had travelled in the country, yet when the British attacking force was at Thanesir, and the insurgents in Kythul, no information regarding the fort was to be procured."

I was only three days in Peshawar in 1837, and was never again in that neighbourhood until with General Nott's force in 1842.

From Dacca to Peshawar there are four roads; the Khyber, Abkhánah, Karapah, and Tatara.

Dacca contains 100 houses of Momand Afghans, of the clans Alamzai, Morcha-khel, and Moosázai, who act as guards to travellers and kafilas, who without them are sure to be plundered.

No revenue is received from these people ; on the contrary, they were always paid by the rulers of Cabool for keeping the above roads open, which they shut immediately their pay was stopt or kept in arrears.

Their charge for protection is,

On every horseman, or horse load,	2/3 rupees.
On every camel load, or pair of kajawahs,	3/3 ditto.
On every foot passenger,	2/3 ditto.

Their chief is Sa'ádat khan, who has command of three of the roads, Tahtarah, Abkhánah, and Karapah, as well as the river route by raft from Jelalabad to Peshawar. He lives at Sulpoor on the other side (from Dacca) of the river. He is in the employ of the rulers on a salary of 12,000 rupees, and the Momands on the above roads, estimated at 45,000, acknowledge him as chief.

On every traveller by raft, one rupee is levied. The roads on this (the south) side of the river, which flows from west (Cabool) to east (Peshawar), are hilly, having many ascents and descents.

The road to Peshawar called Karapah, on the other side of the river, is also hilly and difficult, but not so much so as the others, it being possible, with management, to get guns over it. They have now stopped it up.

The other two roads, Abkhanah and Tahtarah, are safe.

The Khyber road is that for artillery and armies, but the Khyberies are great robbers, and often render a passage by it unavailable. Their word is not to be depended on. They are said to amount to 35,000 matchlock men. There are few habitations on the road, and even off the road they (the Afreedees) live a good deal in caves.

Their chief is Khan Bahadur, by clan a Malik Deen-khel. He and Saleem khan Jopa command 8,000. Abdul Kadar khan, Maddat khan and Alladad khan, Zakha-khels, command 10,000.

The Kukee-khels are 12,000. The Kumbar-khels 10,000. Alam khan Orakzai commands 10,000. The Shanwarees are 6,000. All these have their share in the Khyber.

Other portions of these tribes reside at Barah and Teerah, but they all have a share of the pay allowed by the rulers, and of the collections on the road at the tolls, and for Bodrakahs or guards, and all take their turn of service in the Pass.

From Dacca to Jamrood is in all 24 kos.*

From Dacca to Huft Chah (7 wells) is 4 kos; these were sunk it is said by a Cafer king of old, named Bagram, for the convenience of travellers. In those days the land around them, it is said, was cultivated. Their depth has never been ascertained. They are situated on the high road, four to the East and three to the West of it. The place is infested by thieves, and there is no water or habitations.

The Khyber Pass is a defile between hills, the eastern one belonging to the Shanwarees. The road runs from North to South. From Huft Chah to this Kotal of Sande khánah, is six kos. Below the Kotal (pass) immediately on the road a little to the South, on the skirt of the hill near a ravine, there is a spring of water of one mill strength, flowing from East to West; to the West there is a very high hill on which is a fort of the above named Cafar king, said to have been destroyed by Hazrat Alle, who defeated him, and opened the Khyber. It is now in ruins; there is a little cultivation here, which is a Caffila and army stage. It is on the boundary of the Zakha khel, and Thanwareeg.

There are two roads up the hill, one to the East below the brow, having four windings and ascents and descents three kos in extent; the other by the stream along a ridge, two windings and ascents and descents one kos in extent, not a gun road. On reaching the top the road is again level to Gurheelalbeg, which is four kos and a stage. There are twelve small square forts, having each a lofty tower and eight guz high many of which are hostile to each other. It is the boundary of the Zakha khel. There are 1500 matchlock men in these forts. There is cultivation round the forts, but the inhabitants gain their livelihood by robbing on the highway.

Even when royal armies paid for their passage, the advance and rear baggage generally suffered.

The Khyberee mothers are said to accustom their children from the age of five to six years to steal, beginning with neighbour's fowls, their spinning wheels and other household utensils, stinting them in food the days they are not successful. Sayuds, Molvees and Fakeers are not respected by them, and in stripping them, they jokingly say they intend to hang up their clothes as holy relics in their houses.

* The details are in kachah, or short kos.

From Gurheelalbeg to Alle Musjid, which is in the centre of the Pass, is four kos in a defile, the road is level and a stream runs in it.

Two kos from Gurheelalbeg towards Alle Musjid, from the hills to the West of the road, a spring of water of seven mill strength gushes out, and flows along the high road to the south.

In the Darah, there are Zaitoon, Baloot and other jungal trees. From this spring one short (kachah) kos further, the Pass contracts, and is covered with large stones, the water flowing over them; over and through which people get their beasts of burden with difficulty, and it is not even pleasant for horsemen. This place is reckoned the exact centre of the Khyber. From this gorge to the fort of Alle Musjid is one kos.

It is situated on a high hill, and was of old there. Dost Mahammad Khan, has rebuilt it for the protection of travellers, and for fear of the Sikhs, and garrisoned it with 100 men. It is very difficult of approach, and is situated on the hill that rises from the west of the road. There is a little level ground to the east. The fort was built originally by the kings of old, more it is said as a toll.

From Alle Musjid to Jabagai is three kos, a halting place, but no habitations. From Jabakee (also called) there are two roads. One to the south, called the Dahan-i-Darrah (mouth of Pass) road, to which entrance it is four kos, level and winding, abounding with canes and rushes, having a running stream. After leaving the Pass and entering the plain, there is a village of Khaleels named Jangoo.

The second road from Jabakee to the east is over hills known as the Shadee and Bagyaree road; it is winding, and the distance to Jamrood is four kos, in which there are three Kotals. Jamrood is the name of a village at which the Khyberees used to collect tolls, and give guards. One and a half kos after leaving the Pass there is a rising ground, on which Ranjeet Singh has built a new fort. From Jamrood to Peshawar is five kos to the east over a plain.

I give my Meerza's (he was so from 1838 to 1842) account of the Khyber, that from it judgment may be formed of the scrutiny with which he prosecuted enquiries.

The third road from Dacca to Peshawar is the Taktarah one, twenty kos in extent, very difficult, (the details are in kachah or short kos.) From Dacca to the east, three kos, is Kongah, having the river to the

north, and hills to the south. It contains 230 houses of Momands of the clan of Alamzai and Marchah khel, under Saadat Khan, and three Hindoo shops. From this village guards are procured, their chief is Daeem.

The rates for guards are,

A camel load or pair of Kajawahs,	..	3 $\frac{2}{3}$	rupees.
A yaboo load or horseman,	.. .. .	2 $\frac{2}{3}$	„
A bullock or ass load,	.. .. .	1 $\frac{2}{3}$	„
A foot passenger,	.. .. .	$\frac{2}{3}$	„

The guards are of the clans of Shanwarees and Afreedes, who with Momands and Balagoorees hold the road.

The chief of the Shanwarees is Rahmat Khan ; those of the Balagoorees are Ahmad Khan, Rahat Khan, Afzal Khan and Shahnawaz Khan, Shamsodeen Khan, and Shahabudeen Khan. The Sham-sarees amount to 8,000, the Balagoorees to 8,000, and the Momands to 4,000. They live in difficult parts of the mountains. They are by occupation guards and muleteers, many mules being produced in their country. Half a kos after leaving Kongah there is an ascent of one and a half kos, and after it a second ; when both are surmounted, a plain is entered of four kos extent, on which off the road are twelve forts of Momands. There is a well on the road not bricked, is finished with masonry for the use of travellers.

From this well there are two roads ; one to the south-west is the Rahtarah, and the one direct in front to the south, is the Abkhanah one.

On the Rahtarah road, three kos from the well, are two forts, which is the first stage from Dacca.

From these forts the road for ten kos is in a defile having a running stream, and plenty of trees, but no habitation. The stage is at the foot of a hill.

On leaving this a hill is ascended called the Koh-i-Khuda (hill of God) for seven kos. After which is a second hill called Koh-i-Rusool, (hill of the Prophet) having an ascent of six kos, and descent. It is also called the Tahtarah hill. There are other five lesser hills to surmount, having ascents and descents of three and four kos. There are no habitations on the road, but after descending each hill a small

stream is met, sufficient for drinking purposes. The Shanwarees and Balagoorees are here mixed.

For the next four kos the road is very difficult, over ascents and descents to the Darrah of the Balagoorees; after passing through which the village of Isportang, belonging to the Barozai Khaleels, on the plain of Peshawar, is reached.

The Abkhanah route from the well where the Tahtarah road branches of, is as follows :

One kos to the south from the well there is a Kotal to be ascended, after which for one and a half kos, there is a plain and then a second Kotal one kos to descend. At the bottom the Cabool river runs, and this is a stage; the ferry is called Guzar-i-Guttah, there is a small plain but no habitations, the inhabitants having their dwellings and shops in the hills above, for the accommodation of travellers by raft. On a Caffila arriving, these people descend and prepare rafts of inflated bullock hides to cross the Caffila, if they have Badrakahs or guards with them. It is impossible to cross the river but by raft, and as the stream is confined by high overhanging hills, it is very difficult to proceed along the bank over them, either backwards or forwards, a camel not being able to go. The stage belongs to the Momands under Saadat Khan. On crossing the river there is no open space, and a halt is made among the rocks on the river side, of only sufficient duration to reload the beasts of burden.

The road then for four kos, is an ascent up the brow of hills, without water or habitations, much infested by thieves.

Then the village of Hyder Khaneh is reached, which is surrounded on all sides by hills. The inhabitants live in mat huts, which amount to 100, and there are 200 matchlock men; this is a stage.

Thence the next five kos are over ascents and descents; Zaitoon and Baloot trees are plentiful, as well as the matting grass; the occupation of the inhabitants is mat-making, men and women. They do not wear leathern shoes, but grass sandals, which they wear in and out of doors, on the hills and in the plains; they are called Chaplee or Psaplai.

Thence five kos the road is hilly, having ascents and descents to Michnee, which is situated below hills, on the river, which is to the south. There are two villages furnishing 700 matchlock men. The

names of their Maliks are Buland, Rustum Khan, and Rahmut Khan, Moorchuh khel Momands under Saadat Khan. Although on the river side, their lands depend on the rain, being elevated. The inhabitants' occupations are guards and grain merchants, carriers, and mat-making. On the other side of the river are the Buzazai Khaled Affghans dependent on Peshawar.

The river is crossed on rafts, the charge for a load being $2\frac{1}{3}$ rupees, for a foot passenger $1\frac{1}{12}$ rupee, for a bullock or ass $1\frac{1}{6}$ rupee. The Badrakahs from Peshawar toward Cabool charge as follows :

A horseman,	..	..	..	..	..	$2\frac{1}{3}$	rupees.
A yaboo or mule load,	...	..	..	...	...	$2\frac{2}{3}$	„
A bullock or ass,	..	..	..	...	...	$1\frac{2}{3}$	„
Foot traveller,	..	...	..	..	..	$1\frac{1}{3}$	„

The Badrakahs pay for crossing the rivers.

The fourth, or Karapah road, is as follows :

From Dacca the Cabool river is crossed by boat to Lalpoor, a large village, containing 3000 houses and 120 shops. Saadat Khan resides here. The distance by this road to Peshawar from Lalpoor is twenty-eight kos.

From Lalpoor to the north, at three kos, there is a Kotal called Khurpash, which is a winding ascent for four kos. It may be practicable for armies and guns. The next seven kos, to the stage, is level, which is called Murdar Dand ; no habitations.

The next stage is eight kos, to Gandawah, also called Gandaw.

The road then goes eastward eight kos to Shabkadar, a village of the Duabah of Peshawur.

Between Murdar Dand and Gandawah, there are two small Kotals, and from the latter place to the mouth of the defile, there are two Kotals, one large and one small, and others besides. In the large Kotal there are capacious caves, in which merchants and travellers spend the night. The road of Karapah is held by the Alamzai Momands, under Turbaz Khan, the son of Mazulla Khan, a relation of Saadat Khan's, and chief of 24,000 men.

Of these four roads, I (Alle Mulla) travelled by the Abkhanah, to Peshawar.

From a Dufter at Peshawar, I procured the following estimate of the area of the different dependent pergunnahs :

Total No. of Jarebs.					
Yoosafzai,	1,25,000				
Mandad,	1,00,000				
Jagharzai,	22,000				
Bajour,	1,25,000				
Bunker,	22,000				
		3,94,000	1,34,700	2,59,300	
Tarah and Bangash,	98,500	38,300	60,200		
Orakzai and Bangash-i-Pay-					
ans,	98,000	48,000	50,000		
Dahman and Banoo,	98,300	48,300	50,000		
Khosh and Marwah,	98,000	48,000	50,000		
Khattaks Balla and Hayan,	1,90,000	40,000	1,50,000		
Wazeerees,	3,00,059	1,00,050	2,00,000		
Torees and Jajees,	1,60,000	60,000	1,00,000		
Suburbs (Ahaf) of Peshawar,	3,90,000				
Mohmands,	80,000				
Khaleels,	80,000	44,300	35,700		
Daoodzais,	70,000	30,000	40,000		
Khalsah,	70,000	35,000	35,000		
Duabah,	70,000	30,000	40,000		
Hashtnagar,	40,000	18,000	22,000		
Gardens of Kashbah Bagram					
and Shake Mahal, ..	40,000	7,000	33,000		

Peshawar, by another account I procured, is said to have a revenue of 9,15,300 rupees, derived from 3,24,000 Jarebs, divided into 7 Pergunnahs. Pergunnah 1st.—The Khaleels 25,000 houses in 41 villages, yielding a revenue of 1,05,000 rupees from 70,000 Jarebs. The chiefs being Arbab Janea Khan, Sadmast Khan, and Arbab Zaeed Khan, Miulhee Khel Khaleel.

Pergunnah 2nd.—The Momands 38,000 houses in 55 villages, containing 84,000 Jarebs, under Ghazeedeen Khan, Kareem Khan, and Mahommed Khan, paying a revenue of 1,60,000 rupees.

Pergunnah 3rd.—The Duabali 25,000 houses in 5 villages, containing 70,000 Jarebs, under Arbah Abdulla Khan, Gagynnee Mandezai Khaleel and Arbab Hamza Khan and Arbab Sikandar Khan, paying a revenue of 1,50,000.

Pergunnah 4th.—Iashtnagur, 22 villages, 25,000 houses, 40,000 Jarebs, under Izzat Khan and Shahnawaz Khan Malmandzai, paying a revenue of 90,000 rupees.

Pergunnah 5th.—Daoodzais, 70,000 Jarebs, 20,000 houses, under Arbab Saadut Khan and Shahpasand Khan and Ahmad Khan; revenue 1,03,000 rupees.

Pergunnah 6th.—Shahee Mahal round the town, is applied to the cultivation in the old royal gardens; the Kasbah of Bagram contains 40,000 Jarebs, and pays a revenue of 50,000 rupees.

Pergunnah 7th.—The Khataks, revenue 1,50,000, under son of Abbas Khan and Ameer Khan, 70,000 houses in 67 villages.

There is a Tappah also, called Khalsah, that the kings of old did not include in their revenue, but set apart for their household expenses. The Barakzais collect, it is said, 56,000 rupees from it.

There is also the Sayer of Peshawar, called kacheree, which produces 1,25,000; another Pergunnah of Peshawar is the Eesafzais to the North, 130 villages and 2,25,000 Jarebs.

This tribe inhabiting Swat, Bunher, and Sama are estimated, or rather were, at 9,00,000 spearsmen and matchlock men. I have heard from old and respectable and well informed men of this tribe in Bunher, that Ameer Khan, their progenitor, had one son, Eesaf, who again had three sons and one daughter, Mandad, Malee, and Ako, and that the Malezais and Mandadzais inhabit Bunher, and the Akozais Swat, and the Tarkareen, called after the daughter of that name, inhabit Bajour.

That the Mandad and Razad clans of Mandezais inhabit the Sama (level) and have 69 villages, and musters 2,28,000 matchlock men, horse and foot, (2,09,000 foot, 19,000 horse,) and have 1,92,000 Jarebs of land. Should a powerful Government ever arise, 14,00,000 rupees might be collected.

The Malezais and Mandzais are in Bunher, having 70 villages and 1,00,000 matchlock men. It lies north of Sama, (93,000 foot, 7,000 horse.) They have 50,000 Jarebs of land.

The Akozais inhabit Deer and Swat, mustering 1,95,000 matchlock men, (1,48,000 foot and 47,000 horse.)

Deer and Swat contain 83,000 Jarebs. It is said that the whole of the Eesafzais matchlock men are estimated on the Hujrah. Each Hujrah contains 13 rebs, and each reb 19 zeer, each zeer 12 bakhrahs, (shares) and each share 9 keelbahs, and to each keelbah 60 seers seed, and for every seer seed one Jareb, and every share furnished six matchlock men, foot or horse.

The Eesafzais have another custom, that of changing their villages and lands every two or three years.

Another Pergunnah is that of Bajour, inhabited by the descendants of Tackareen, and contains 1,25,000 Jarebs. The kings of old collected 1,40,000 rupees, they are now independent. The chief is Meer Alum Khan, who has thirteen guns, and seventy Shakuns, and 2,000 Jazeels of Zattulla Khan's time. This Zattulla Khan is said to have been a Lodee, left by Aurangzeb as Governor of Peshawar, and to have made 12,000 of these long pieces, for taking effect on the Teerahs and Khyber robbers on their heights, of $2\frac{1}{2}$ gaz in length; these Jazeels are called after him.

Bajour of old depends on Peshawar, from which it is N. W. It has to the north the Cafers,* with whom constant war is waged.

Another Pergunnah is Cuner, containing 46,000 Jarebs, which paid 34,000 rupees to the kings of old. Ahmad Shah Duranne gave it to Sayad Hajeeh, whose sons are the present chiefs, one named Sayad-wodeen; 20,000 matchlock men can turn out, (3,000 horse and 17,000 foot.)

No revenue was taken by the Sadozyes; Mahummad Azeem Khan, from Jalalabad, attacked Sayad Hajeeh, and making him prisoner, fixed the revenue of his country at 30,000 rupees. A further account of Cuner is contained in Part I. of this account.

The following is a more detailed account of the Duabah, which is inhabited by Zagyanees, under Arbab Abdulla Khan, and Sikandar Khan, sons of Hamza Khan, son of Ashraf Khan, of Shah Kadar.

They formerly received 4,000 rupees pay from the kings, and furnished 800 cavalry and 8,000 infantry. There are 48 villages in the Duab, containing 6,640 houses, and paying a revenue yearly of Rs. 1,21,310.

* (Siyah-Pósh.)—EDS.

I also gained the following particulars of Hashtnagar. It contains twenty villages, and 40,000 jarebs. The revenue is 95,000 rupees. The ruler is Sayud Mahammad Khan, brother of Sultan Mahammad Khan. He has a body of 700 cavalry, and 400 foot. The villages are as follow:—

Noushera, ..	6000	Rs. under Mulla Ghulam Kadir, 3000 Jarebs.	
Dheree,	1000	.. .. .	80 „
Kheskhee, ..	6000	.. .. .	300 „
Nisata,	1000	.. .. .	70 „
Padang, ..	6000	.. .. .	200 „
Bhabda, ..	6000	.. .. .	2000 „
Charsada, ..	9000	.. .. .	2000 „
Gudee Bayáz Nu-			
jan,	2000	}	400 „
Gudee Hamud			
Gul,	700	}	100 „
Gudee Kaka khel,	800	.. .. .	150 „
Jum Darasha			
Nujan, ..	800	}	150 „
Razad,	2000	.. .. .	300 „
Oosmanzai, ..	6000	.. .. .	2000 „
Omarzai, ..	4000	.. .. .	2000 „
Sherzai, ..	6000	.. .. .	3000 „
Gudee Bunda			
Nujan khel,	1000	}	200 „
Tangee, ..	12,000	.. .. .	6000 „

under Malahs Dost Mahammad and Afzal Khan.

The fort of Hashtnagar has two gates and two guns.

From Peshawar eastward, I proceeded twenty-four kos to Deree on the other side of the Sandye river, included in the pergannah of Hashtnagar, inhabited by Mahammadzais. The former chiefs were Meer Baz Khan and Shahnawaz Khan; the present are Meer Ahmad Khan, the son of Zardad Khan Bamezye, on the part of Sayad Mahammad Khan. The revenue is 1000 rupees, there are 700 jarebs dependent on the rain, and 200 jarebs watered by six wells. The river water is not available for cultivation. There are 200 houses

and four Hindoo shops, seventy footmen and ten horsemen. There is a ferry boat on the river, used by merchants who trade between the Eesafzais and Peshawar. Two crops a year are produced of wheat, barley, Indian corn, and cotton. The inhabitants are at enmity with the Eesafzais regarding the pasturage of their herds on the plain to the east. The river is to the west of the village in which there is an island on which cattle are grazed.

Three kos to the south is the village of Kheshkee, which is on the river also, having a ferry boat. There are two kandees, one called Bur kandee of Shekhs and Nujan khels, and the other kandee of Panchtana. The former has 600 houses, under Nujan Afzal and Nujan Ahmad Kheshkee. Panjtana has 1,700 houses and twenty-five shops of Hindoos. Both hamlets could furnish 300 matchlockmen, (260 foot and 40 horse.) It was formerly under Shahnawaz Khan Mahammadzai.

Between the two kandees there is an earthen mound on which are Cafer ruins. Across the river to the west there is a bela, (island) on which cattle are grazed. The river water is not available for cultivation. There are seventy wells in the village. The revenue is 6,000 rupees included in Hoshtnagar. To the N. E. there is a plain called Merá, on which the plant called, in Persian Ushlan, and in Pushtoo Sanari, which is burnt for ishkhar (potash,) which is exported in thousands of kharwars by Khattak and Ormiar merchants. It gives a greater return for labour than cultivation of grain. The inhabitants have 1000 cows, 700 buffaloes, 4000 sheep, and many asses, and are chiefly traders. They were at enmity formerly with the men of Noushera and the Eesafzais, *i. e.* before Runjeet Singh subdued the country.

It is three kos from Kheshkee to Noushera south-east. The chief was formerly Shahnawáz Khan, son of Faiztalah Khan; now Runjeet Singh has given it to Sardar Saiyad Mahammad Khan. The headman is Mulla Ghulam Kadur, the Sardar's Naib. Its revenue is 6000 rupees. There are 6000 houses, and 120 of Hindoos, and 200 shops, and 1000 matchlock men. The Parachahs are chiefly traders. The river is to the west of the village. There is a ferry boat.

Round Noushera there are 1000 jarebs of watered land, and 200 wells.

To the north of Noushera there is a hill called Tarkai, on which are the remains of Cafer buildings, and to the east there is a rising ground. Shahr-i-Safa, known as Shahr-i-Sabbak, on which are also Cafer remains, but no towers or minarets.

Below the skirt of the hill to the N. E. of the river are some houses of Afghans. There is another rising ground to the east, called Zadah Nujanah, and also the hill of A'dam and Durkhanee; the shrine of these lovers being below the hill on the south side, where there are also seventy houses of Afghans, and these two hillocks are near each other on the river between Noushera and Acora.

Across the river to the west there is another village also called Noushera, on the road newly built by Runjeet Singh, as is the fort. It was ruined by former rulers and by robbers. There are 200 houses a bazar, and a mandee.

I learnt that one Abdu Rahman, son of Imamudeen Parachah, a resident of Noushahrah, found a vessel of old gold coins on the neighbouring hill, and that on its becoming known, he suddenly decamped at night with his family to Kuram, in the vicinity of Bungash.

Leaving Noushahrah to the south, and passing the above hill, I entered the plain of the Eesafzais; the road leads through a defile in the hill called Tarkai, with difficulty passable to guns.

Two kos from Tarkai in the plain is a tank called Ateeh, and beyond it one kos, on the river bank, there is a road over an eminence on which are remains of Cafer buildings; and three kos further is another eminence called Dakhla, also having ruins on it. Two kos further is an eminence called Taree, also crowned with ruins, as well as with scattered houses of Afghans.

Two kos further on, there is a lofty eminence called Baba Deree, on which there is a square fort, built by Malik Daleel khan.

There are 700 houses of Eesafzais, and four wells and several young mulberry trees. The inhabitants are chiefly herdsmen: they are on good terms with Daleel khan, son of Jalal khan of Taroo, and at enmity with Ahmad khan, son of Lashkaree khan, of Hootee.

Half kos further on is the village of Toroo, and before reaching it is Kacho Daree, on which there are also Cafer remains.

There is a stream called Kalpanee, running from north to south through the village of Toroo, on which there are water wheels. Most

of the Mandad Eesafzais get their drinking water from this stream, which is fed from a spring. It has great capabilities, which might be brought to account by a powerful government. It is not much used by the tribes on account of their internal feuds. The villages immediately on its banks cultivate vegetables, Indian corn, and a little sugar-cane.

The reason that the Eesafzais never paid revenue is variously given. An account is, that the Eesafzais gave great annoyance to the authorities of the emperor Akber, when building the fort of Attock, and therefore when it was finished, a force of 12,000 men under the Wazeer Beerbal, was despatched against them, which was utterly destroyed by a miraculous shower of stones which fell on them in the Kala defile, brought down by the curses of a mad Eesafzai fakeer, by name Jahan khan, an Umar khel, who received some injury from one of Akber's authorities.

Akber granted them, in fear, a perpetual indemnity from taxation, and none of the Chaghatai, Moghul, or Affghan monarchs assessed them until the time of Runjeet Singh, who took advantage of their internal dissensions to get possession of the greater part of Sammá, from which he levies revenue only by yearly sending a large force to collect it.

Nadir Shah is also said to have remitted their revenue on account of their restoring to him his crown, which one of them stole while he was encamped near the Attock or Indus. Some say that it was remitted by a monarch, who became alarmed at getting 9,00,000 spears of revenue, which he once ordered to be collected at the rate of one from every house. Others say that it was remitted in consideration of the pooriness of their country, and on condition of their eternally waging a religious war of extermination against their northern neighbours, the Cafers.

Mandad is said to have had five sons, whose descendants occupy the Sammá country of the Eesafzais (Afghanee) or Yoosafzais (Persian).

Kamal and Aman were two brothers, whose descendants were called, and are so now, Kamalzais and Amanzais.

The former are again divided into Mishar, (elder) Kamalzais, and Kishar (younger) Kamalzais.

The Mishar Kamalzais hold the villages of Hotee, Mardan, Mayar, and Baghdada, each containing about 2000 houses. Their chief oc-

cupation is trade in saltpetre. Their chief is Ahmad khan, son of Lashkaree khan of Hotee, who collects the revenue for Runjeet Singh from these four villages.

The Kishar Kamalzais hold the villages of Toroo, Ghala Deree, and Gujar Gadee, containing each on an average 2000 houses and 200 shops, to which merchants from Swat, Michnee, and the Punjab resort. Their chief is Daleel khan, son of Jalal khan, who is an enemy of Ahmad khan's, the latter having with the assistance of the Sikhs taken possession of his estates. Each of those villages could furnish 700 foot and 80 horse. Ahmad khan is a son-in-law of Anayatullah khan of Swat.

From Toroo to the east four kos are the Amanzais, who are again divided into Doulatzais and Ismailzais.

The Doulatzais hold Gurhee Amanzai, Gurhee Kapoorah, Shahbaz Gurh (Kot), and Derah Gurhee, each of which villages contains on an average 4000 houses, and could furnish 2000 foot and 200 horse. Their chiefs are Nasarulla khan, Namdar khan, and Ameer khan.

The Ismailzais hold Gumbat, and Barah Kot, and two other villages, each containing on an average 4000 houses and 200 shops, and being capable of furnishing 1000 matchlocks. They have to the west the Kalpanee stream generally speaking, but there are villages on either bank. Their chiefs are Mansoor khan and Zyarat khan. Sardar Huree Singh took away from the Ismailzais two guns that they had. The Amanzais have 3000 jarebs watered by the rain, and 1000 jarebs watered by the Kalpanee. They have internal feuds, and are constantly employed in fighting among themselves, or in robbing the highway. They are somewhat held in restraint by Ahmad khan, the Sikh spy. The ground on the borders of the Kalpanee, is capable of being cultivated to a great extent were safety secured the cultivator by a powerful government, and lacks of rupees of revenue might be collected; much of the land is capable of giving a ten-fold return on the seed.

The Sama country is bounded on the west by Asnee Kot, on the east by the Abaseen (Indus) at Amb, and Daraband on the south by the Attock (Indus), and on the north by Swat, Buner and Sudoom. It is 38 kos by 26. A particular account of the villages in it has been given to Major Leech, by Shekh Khashalee.

The country of Sama chiefly depends on the rain, and grows one crop. In some parts two crops are grown, where running water is procured.

The whole of Sama is said to be able to furnish 2,30,000 foot, and 12,000 horse.

From Gurhee Amazai to the north, towards Sudoom, fourteen kos, is the hill called Kadamar, beyond which is the village of Garyala, consisting of 100 houses on an eminence. This hill Pass is the boundary of Sama and Sudoom. The village contains seventy matchlocks, footmen, and six horse, under Lashkaree khan, who is at enmity with Mansoor khan, and friend with Nasarulla khan.

Two kos further is Gulyara, a fort on an eminence, of a square construction, containing forty kos within and 400 around it, with seven shops, and furnishing 200 foot, 27 horse, under Mansoor khan, and Yakooob khan, and Maddat khan. There are 700 jarebs in cultivation. Below the fort, there is a stream running from north to south.

Three kos further to the east is a hill called Doda, on which there are 400 houses under Afzal khan. Cultivation 600 jarebs.

One and a half kos to the north is the village of Sirah Derai, containing 600 houses, furnishing as many foot, and twenty horse, under Ashraf khan. Their lands are chiefly *lalmee* (dependent on rain.) They have some *abee*, (watered by streams or wells) also. The name of the stream is Naraikhod, which rises in the hills to the east. They are enemies of the men of Gurhee Amanzai, and friends with the men of Taroo.

Two kos to the north is the village of Machai, containing 160 houses, under Meer Mobean khan and Ismail khan. Cultivation, *lalmee* and *abee*, giving two crops. They are independent.

One kos further is the village of Char Gholai, containing 300 houses, under Ameer khan. Cultivation mixed, (*lalmee* and *abee*.) They use the water of the Naraikhod for drinking: they are independent. To the west in the plain trees abound.

One and a half kos further is the village of Osai, containing 200 houses, under Meer Mobean. Cultivation 700 jarebs *lalmee*, and 100 jarebs *abee*. The drinking water from the Naraikhod.

Two kos further is the village of Rustam, containing 600 houses, under Ramatulla khan. Cultivation 1000 jarebs *lalmee*, and 200

jarebs abee. The drinking water is from a stream issuing from the hills to the north. They are independent.

One and a half kos further to the west is the village of Bazar, containing 700 houses, under Mansoor khan. Cultivation 2000 jarebs lalmee, and 300 jarebs abee. Drinking water from the stream.

Further on to the west off the road are the villages of Palee, Cheenah, Suroch and Landai, each containing 300 houses, under Sahib Shah Nujan. The cultivation of each, 1000 jarebs lalmee and abee.

Two kos further on is the village of Alee, containing 700 houses, under Mansoor khan. Cultivation 1000 jarebs lalmee, and 100 abee. Independent.

Further on four kos to the north-east, through a jungle over a winding road, two villages are reached, one called Peetawai, the other Syarai, under Malik Gujar. They each contain seventy houses. The hill which is here called Mabandarai, is the boundary of Sudoom and Bunher. The Khatak, Eesafzai, Samah and Peshawar merchants go by this Pass to Bunher. It is difficult for laden yaboos, bullocks, and asses. The ascent is four kos, and the descent two.

From the village the road leads to the north, winding up the hill which is very thickly wooded, the interwoven branches sometimes stopping the road; it is not of course a road for guns or even camels, a horseman being often obliged to dismount and lead his horse. Trees of different kinds, among them the Archah and Jalghoza, (fir and pine) are to be met with on these hills. The descent into Bunher from the top of the Malandasai Pass, is through a ravine. In this part of the country Mullahs and students (yalibilms), are much respected. There is no water in the Pass, or on the hills. In winter snow falls on the Pass, but does not lay on the ground.

One and a half kos from the Pass is the village of Zangee banda, in Bunher, in which there is no water. The inhabitants bring their water in pitchers from a spring at the foot of the hills to the north, one and a half kos distant. Cultivation 400 jarebs lalmee, and no abee. There are 130 houses, under Malik Kadazai.

On the road after descending the Pass, there is a shrine, or Mazar, of one Shekh Sher Kookho Baba, and a grave-yard. A fakeer, with his wife, officiates at the shrine. Kafilas take a rest here. It is also a stage or halting place.

Three kos further to the north is a village called Nawai¹/₂kilee, containing 700 houses of Burkhah-khel Eesafzais Bunherwal, under Zyarat khan and Meer Sahab khan. The cultivation is lalmee.

From this village to the east, in the hills, is a valley called Yoosaf Darrah, in which there are 400 houses; and adjoining it to the north-west is another valley, called Ghanum Darrah, containing 800 houses. Cultivation lalmee. Trees of the kinds Zaitoon, (olive) Baloot, (holly-oak) Archah, (fir) are plentiful, and serve for firewood. The interior of the valley is attractive and open, but the inhabitants are a lawless set, and have many quarrels at the time of changing lands. Their chief is Ahmad khan, son of Azad khan.

One and a half kos further on is the village of Kadappa, containing 300 houses, under Maddat khan and Muneer khan. Cultivation lalmee. Their drinking water is brought from a distance in pitchers on the head. They have large flocks and herds.

Two kos further north is the village of Pishtool Darrah, containing 1000 houses of Doulatzais, under Manzal khan and Natab khan, embosomed in hills. Cultivation 2500 jarebs lalmee. Their drinking water is brought from a distance from the east.

To the north of the village the road leads through a defile so narrow, that a laden ass passes with difficulty. Half a kos after getting clear of the defile a river is reached, flowing from west to east through hilly defiles, until it falls into the Abaseen. It fertilizes the whole of the Bunher lands, and those who inhabit its borders cultivate rice and chiefly live on it, boiled soft and mixed with ghee. The cultivation lalmee; wheat on rising grounds and skirts of hills.

To the north of the road across the river is the village of Shil Bandai, containing 400 houses, under Bahadur khan.

There is another, called Kalpanai, containing 500 houses, under Shahdad khan.

There is another, called Mash katta, containing 400 houses, under Fazal khan, and Bhadur khan, the son of Shahdad khan.

There is another called Kulgarai, containing 400 houses, under Nouroz khan.

There is another called Matwaridain, containing 2000 houses, under Mahib khan. They each cultivate the land of their bakhrah, or

share, and pay no revenue. Their Maliks only commanding them in feuds with neighbouring Khels.

Three kos further to the west, after crossing a rising ground, is the village of Dakad, containing 300 houses under Azeem khan.

Two kos further to the north, is the village of Derai, containing 300 houses under Hajeah khan.

Further to the left (north) of the road, is the Burindoo river, flowing from west to east; and to the north of the road, a hill has been cut through by some king of old to give the river a passage, through which it rushes with great violence. The volume may be of 100 mill strength. The breadth of the cut may be twenty paces or less; on each side of this hill there is a plain. The name of this cut is Soorai kand.

Five kos further to the west, is the village of Heelai, the road being very bad through jungle, and over descents and ascents. The head of the village is Futteh Ali khan, son of Madar khan, Ashezai. It is divided into fourteen hujrahs, contains 1500 houses and 47 shops. The merchants from the Khattak country bring salt, cotton, oil and cloth, and take away grain, ghee and honey, to Peshawar. The inhabitants drink the water of the Burindoo, on which there are 25 water mills, which grind flour for the whole country. The village is on a soft rising ground, on which there are fissures caused by the water on all sides. The river passes in rear of the village; to the south of it firewood and forage are procured from the hills. The country abounds with sheep, cows, buffaloes, and goats. They are friends with the Salarzais and enemies of Doulatzais. Cultivation on rising ground (lalmee) 2000 jarebs, and on the river bank (ábee) 1000 jarebs (rice and Indian corn).

Two kos further is the village of Dagar, containing 400 houses, under Bahadur khan.

Three kos to the west is a large village called Anghapoor, consisting of 14 Hujrahs, containing 2000 houses and 50 shops, under Jarwar khan and Rahmat khan. Cultivation 2000 jarebs lalmee, ábee 1000 jarebs; the rubee fusul, wheat and barley; the inhabitants live principally on rice; they are enemies of the Salarzais and friends of the Noorzais.

Four kos further is a village on a rising ground called Torasak, composed of 18 hujrahs, and containing 2,500 houses and 50 shops, under Bulaud khan, who is a friend of Tallalee khan of Heelai, and an enemy of the Salarzais.

From Heelai five kos to the east, is the shrine of Peer Baba, the spiritual father, and place of pilgrimage of all the people of Swat, Bemher and the Eesafzais. There is a village also called Zyarat, containing 1,000 houses and 50 shops, under Myún Sayad, Sarbulund Shah and Myung Sayad Ahmad Shah and Afzal Shah, and Maliks Saádut khan, Tozal khan, and Ahmad khan. The Zyarat of the Peer is surrounded with numerous sheesham, zaitoon and mulberry trees. The Zyarat has no dome; there are two sarcophagus in the shrine of ornamented gypsum, over the tombs are narcissus, zumbuk and roses growing, and the mujawuns, or officiating priests, amount to 400 or 500; they receive all votive offerings and offerings as thanksgiving. The Shekhs and Sahabzadahs entertain all visitors and strangers. The whole people of Bunher are more or less influenced and guided by these Sahabzadahs.

Twelve kos to the north-west is the Kadakad hill, beyond which is the Pergunnah of Swat, and on the road are the following six villages.

1st. Kingar galai, consisting of 200 houses, under Shahbaz.

2nd. Chhurai, containing 300 houses and four hujrahs, under Abdulla khan.

3rd. Bazargai, containing 300 houses and four hujrahs, under Azam khan.

4th. Bam pookhah, containing 200 houses and four hujrahs, under Maddat khan.

5th. Johar, containing 300 houses and four hujrahs, under Maddat khan.

6th. Sugaren, containing 500 houses and four hujrahs, under Maa-zam khan.

Each hujrah contains eighteen bakhrahs, and each bakhrah twelve rupees, (jarebs?) and to every rupee twenty foot men, and 2 swars. Every rupee contains sixty jarebs of land.

Their drinking water is from a stream that issues from a ravine. They are all Salaizais, and are at enmity with the Ashezais and

friends with the Doulatzais, and are independent. There are 2,000 jarebs of lalmee cultivation on rising grounds, and 1,500 ábee on the banks of the stream, (Shelah.) The inhabitants are owners of large herds and flocks.

There are besides in all directions villages in vallies in the hills. For instance, to the east, near the Abaseen river, are the following :

Bagra, containing 500 houses under Buland khan. Babda ditto 400 ditto. Padba ditto 500 ditto. Chagharzai ditto 700 ditto, Aman khan. Marhad ditto 400 ditto. Kot and Cabal. ditto 700 ditto, Sahah khan.

The inhabitants of the above are Sherzais and Eesafzais. Their chiefs are Iman khan, Buland khan and Sahab khan.

The cultivation is 4,000 jarebs of lalmee, and 1,500 jarebs of ábee, and each village contains two or three hujrahs each.

To the west is Ghazee khanah, containing 700 houses and four hujrahs, under Sarwar khan, Gudazai, the ábee cultivation being from the Burindoo.

Three kos further is another village called Nadai, under Ralmat khan Gudazai, containing two hujrahs and 200 houses. The above two chiefs are friends, and at enmity with Mohsan khan Shamaszai.

Three kos further is a village called Bae, under Mohsan khan, containing 400 houses and three hujrahs, and the shine of Sultan Wais Baba.

There is another village called Badshah kilai, containing 400 houses of Gudazai, under Noor khan and Zattullah khan. I have heard, as I said before, from old and intelligent men of Bunher, that two of the three tribes of Eesafzais inhabit Bunher vizult, Maleezais, and Mandeezais.

The Maleezais are again subdivided into the following five gurohs, Gudazais, Salarzais, Ashezais. The tribe of Top Darrah, and Panch-paes.

The Mandezais are also again subdivided into the two gurohs of Doulatzais and Noorzais. The whole pergunnah of Salarzais, containing twenty-four hujrahs, on each of which matchlocks, horsemen, and lands are distributed. The chiefs are Kachkol khan, Baba khan and Alam khan.

The whole pergunnah of Gudazais, contains sixteen hujrahs.

That of Ashezais twenty-one hujrahs.

That of Top Darrah eighteen hujrahs, and that of Panchpaees twenty-two hujrahs.

The whole of the Maleezais have 101 hujrahs. The Doulatzai, Maleezais have thirty-one hujrahs, and the Noorzais forty-two hujrahs, making in all seventy-three.

The Gudazais are divided into four Tappahs. Husen khel to the east have four hujrahs, under Sarwar khan.

Husan khel to the north, have four hujrahs, under Kachkol khan and Baba khan and Alum khan. Aleesher khels, to the south; have four hujrahs, under Nouroz khan, Alee khan and Ahmad Shah Megan.

Ibrahim khels, to the north-west, have four hujrahs, under Deewan Shah.

Between the Aleesher khels and Ibrahim khels, there is a distance of five kos.

The Salarzai Maleezais have seven villages to the west.

Hujrai contains three hujrahs, under Shahbaz khan.

Seegaren contains four hujrahs, under Abdulla khan.

Kingargalee contains four hujrahs, under Azam khan.

Seiz contains four hujrahs.

Bazangai contains four hujrahs, under Azam khan; Johar and Bam-pookhah, contain each four hujrahs, under Sargandai and Hijran. They are enemies of the Gudazais.

The Ashezai Maleezais, have three towns. Heelai contains seven hujrahs, under Fattalee khan.

Aughapoor contains seven hujrahs, under Daum Shah.

Torahsak contains seven hujrahs, under Afzal khan; each of these towns has forty or fifty shops, frequented by Putwad Puklee, and Chuch merchants.

Top Darrah has four villages; two of them have three hujrahs each, and the other two four each, under Alam khan.

The Panchpaees have five villages; three of them four hujrahs each, and two of them five each, under Taoos khan and Ghazee khan.

The Doulatzai Mandeezais have three villages; Dagar has two hujrahs, under Shah Doula. Six kos to the south, there is a village called Bandedzai, having five hujrahs, under Fattah khan.

Six kos to the east, there is a village called Thil bandai, having eight hujrahs, under Nizam khan.

The Noorzai Mandezeais, have ten villages, each of four hujrahs, to the north-west, under the Eelem hills; their drinking water being from the Burindoo river, and from springs, under hills to the south.

Their chiefs are Mansoor khan, Ahmad khan and Azad khan. The names of the villages are Kharappa, Reega, Noukalee, Sadacheena, Derai, Barkalaipanchpao, Deegda, Paltoreen, Kohkandee, two villages, upper and lower.

Another tribe, the Moleezais, are towards the east, at the entrance of a valley, at a distance of nine kos. They have two large villages, Kalpanee and Talpanee, having each four hujrahs, under Arab Shah Bunherwal. The Khattak merchants, bring salt, oil, and cloth, laden on bullocks; and take back, ghee, honey and rice. The Malikis levy from them as black mail, $1/24$ th rupee per load.

Bunher is surrounded or bounded in all directions by hills, that have separate names.

To the east, is the Handoo hill, having an ascent of three kos, wooded with Jalyhozah, Archah, Zaitoon and Baloot trees, and frequented by monkeys, bears, hyænas, wolves, the hill Gongawaz, and wild goats and parrots, sharaks, and the seven colored bird, the kabk, the sisee.

Nothing is known of mines in this hill. Scanty streams are fed from the melting of the snows on these hills in the winter, and grazing is found on it for cattle and flocks in rich abundance.

This hill is within the jurisdiction of Ahmad Shah, and Deewan Shah, Alee, Sher khels. The road over this hill is not practicable for camels, it is difficult even for horsemen. The inhabitants on its skirts do not live in forts, but they are rich in flocks and herds.

To the south there is a hill and a Pass called Mah Bunher, thickly populated, and having mines of zâk and sulphur.

To the south are also the Malandarai hills and Ghudoo hills, through which there is a road taken by people from Samah to Bunher.

To the west there is a hill called Jafar, and another called Koh Kanda, abounding with masonry, remains of Cafer buildings, the ascent and descent of which is eight kos. It has no mines, is very

difficult of ascent, and snow falls on it. It is within the jurisdiction of Malik Buland khan, Sherzai; the alchemist's plant is found in it.

There is a hill to the north, called Eelam, or rather two, one called Loeë Eelum, and the other Oodookai Eelum, having an ascent of four kos; snow falls on it to a great extent. It is in the jurisdiction of Shahbaz khan, Azam khan, and Abdulla khan, Salarzais, and Ahmad Shah Myan. In the Pass to the north is the splendid shrine of Sayud Meer Alee, Turmezai, known as Peer Baba. From the Handoo to the Jafar hills is twenty-nine kos, and from the Malandarai to the Eelum hills is twenty-five kos. The Burindoo river runs within these boundaries. It comes from the south by the village of Sugaren, which is in a valley and winding, and fertilizing the land on its banks goes east by the villages of Parbha and Jafarzai and Babda, and over the plain of Bakda and Marhad, and falls into the Abaseen.

After gaining this information I left Bunher for Swat.

The whole cultivation of Bunher may be stated at 50,000 jarebs lalmee, and 35,000 jarebs ábee. It may be said capable of furnishing 60,000 foot matchlockmen and 5,000 horse, and to contain 111 villages, large and small.

From Bunher to Swat, there are three roads. One over the Jwaharai hills to the south, which are very lofty, having an ascent of seven kos, and snow always on its summit. It is not a camel or horse road, and foot-passengers even meet with difficulties. On the Bunher side of the hill there is a village called Poolhanad, containing 120 houses of Gudazais, under Myán Sayud, Amad Shah, a descendant of Myán Sayud, Munawar Shah, alias Peer Baba; and on the other, or Swat side, to the north-east, are two villages, called Sipal Banbai and Mingoda. This road bears north-east from Peer Baba. Their chief is Zaidulla khan, Baezai Swatee; there are 700 houses. The distance from Peer Baba to Sipal Bandai is seventeen kos.

The second road is over the Karakar hill to the north-west. On the Bunher side is the village of Sagaden, containing 700 houses, under Najaf khan, Kasam khan and Nazeer khan. The ascent and descent of this hill is nine kos.

On the other side is a village called Nawahgai, and two kos further on in Swat is the village of Barah Kot, inhabited by Babazais, under Ghazan khan, son of Mahammud Jeev khan. This road is passable

for horsemen and laden bullocks, but on account of the robbers, guards are required. Many kinds of trees and wild animals are to be met with in these hills.

The third road is over the Kaleel hills to the south-east, and winding. There is a village on the Bunher side, called Garkand, containing 600 houses of Salarzais, under Darah Shah. The ascent and descent is five kos. The road is difficult, and little frequented. The hills are plentifully wooded. On the other side are the villages of Janbel and Kokarai, each containing 100 houses, under Zafar khan Babazai. From Gohkanda to Kokorai is eight kos.

I went by the village of Shkha kot. Of the tribes of Maleezais, Mandeezais and Akozais, the two former of which inhabit Bunher, and the latter Swat. The Akozais are divided into three tribes: Rarenzai, Baboozai, and Khwazozai.

The Rarenzais have 12,000 matchlock men, and 3,500 jarebs lalmee, and 1,500 jarebs ábee, and fifty-two villages, under Anayatulla khan, son of Abdulla khan, who himself has two villages, one on this side, to the west, towards Hashtnagar, and the other on the other side of the Mullah kand, called Allahohand, where he resides, to the east in lower Swat called Aswat.

Swat is divided into Sar Swat, Bar Swat and Deer, chiefly under Anayatulla khan, and a small part, under Zaidulla khan Babozai, and Ghazan khan Khwazozai.

Some of the villages under Anayatulla khan, are as follows:

Those towards the Mullah kand are fourteen in number, Vizut, Narai, Obo, consisting of 300 houses; Doobandai to the west, containing 400 houses, half a kos from Mulahkand; Bhorek to the west, one kos, containing 300 houses; Iskhakot to the west, containing 1,500 houses; Gadai, two kos, containing 400 houses. Heeran kot, containing 500 houses to the north-west, one and a half kos, having 1000 jarebs of lalmee; Dargai, two and half kos to the north, contains 1,500 houses; Kharkai, two kos to the north-west, contains 700 houses; Dareer, two kos to the north, contains 400 houses; Sanez, two kos to the north-west, contains 400 houses; Paroo, one and a half kos to the west, contains 300 houses; Kaldarah, two kos to the north, contains 500 houses; Kadam khel, one kos to the east, contains

200 houses ; Baghdarah, one kos to the north, under the Malahkand, contains 150 houses.

Between Swat Proper and this Swat, is a hill over which there is a Pass ; the name of the hill is Malah kand.

From Skha kot to the north-east, five kos, is a road partly through a defile called Jambar, through which there always blows a violent wind ; there are two mounds in the defile, called after Adam and Darkhanai, because these lovers met there.

There is another unfinished road over the hill to the north, said to have been commenced of old by a monarch, named Kumran Shah, who intended by it to lead an army to subdue Swat, but died before it was finished, and the Swatees destroyed much of his work, and opened the road by the defile: traces of this road over the Malah kand are still visible.

The merchants of Hashtnagar, the Khatah country, the Duabah, and Samah, bringing Karbas cloth, cotton and salt, on camels and bullocks, pass into Swat viâ Skhat kot, Dargai and Jambar, by the Malahkand Kotal.

The following duties and black mail are levied,

On a load of Salt,	.. ..	3 shahees, (1/12th rupee).
Ditto ditto Cotton,	.. ..	5 do.
Ditto ditto Ghee,..	.. ..	5 do.
Ditto ditto Cloths,	.. .	6 do.

by Anayatulla khan, for which he protects merchants.

The whole country of the Rarenzais, is under Anayatulla khan.

After passing the Malahkand, and entering Swat itself, the following Rarenzai villages, under Anayatulla khan, are met :

Shahar, of 200 houses ; Dahrai, 200 houses ; Jolagram, 300 houses ; Matkaran, 200 houses ; Hissar, 200 houses ; Tootakan, 200 houses ; Shaibetai, 400 houses ; Batkheleh, 1000 houses ; Nonkalai, 300 houses ; Amankot, 300 houses ; Allahdant, 2000 houses ; Bandagai, 100 houses. Besides these there are many smaller villages, having twenty and thirty houses each.

The villages that I visited myself, shall be fully described.

Anayatulla khan has married the sister of Zaidulla khan, and thus cemented a friendship. By her he has several sons. He is at enmity with Ghazan khan of Deer, and Meer khan of Bajour.

There is another tribe in Swat to the East, called Baboozai, who have seventy villages and 18,000 matchlock men, (foot) under Zaidulla khan, the son of Hasan Alea khan, and Mazulla khan, the son of Jamand khan, a Khaukhel. This tribe, especially to the south, is very unruly. Their lands are on the skirt of hills, and in valleys and on streams, some lalmee and some abee.

The river Sandai runs through the whole of Swat, from the boundary of the Rarenzais to that of the Banzais, is one and a half kos. The villages are: Bakhta, Tharan, Jalalah, Nawahgai, Natmeda, Dagai, Satmeda, Badeekot, Ashteeekot, Amboolah, Garhatai, Panjgram, Karatai, Namee kalai, Bar kalai, Haibat gram, Koth, Kotagai, Mingrawad, Sangootah, Manglawar, Charbagh, Julaibagh, Teekdarai, Khoonah kateelah, Saidoo, three villages, Singuradad, Aleegai Sokat, Malbar, Kamharkalai bagh, Jooleezai, Alamganj, Matwarairi, Khwazah khel, Mirgai khel, Barah khel, Panjeegram, Hoodeegram, Jinkai khel, Nipkai khel, and Balogram.

There are other smaller villages in the hilly valleys.

Zaiddullah khan pays in ready money, 200 Suwars and 500 foot.

The third tribe of Swat are the Khwazozais, under Ghazan khan the son of Kasam khan, the son of Mulla Ilyas, whose authority over his clan of Deer is great.

They are estimated at 38,000 matchlockmen. In the valley of Swat there are fifty-four villages, and in the valley of Deer sixty-two villages.

There are two rivers in the Pergannah of Ghazan khan; the Swat river, flowing from south to north, called Sandai, and the Deer river. The villages are mostly in hilly valleys, and few in plains. There are high hills on all sides. The cultivation consists of 38,000 jarebs lalmee.

They are all under Ghazan khan, who in every village has posted a man of his own as Malik, to hear the complaints of the ryots. He takes $\frac{1}{5}$ of the produce, or cultivates $\frac{1}{5}$ of the lands. There are four small forts, each having 50 or 80 houses, and villages containing

100 and 200 houses, populated on the hills. The villages of the plains have each from 500 to 1000 houses.

Samah and Khatah merchants bring salt, oil, cotton and cloth, and take away ghee, honey, rice and wheat, on bullocks and mules.

The people that he appoints as Hakims and Maliks of villages, have portions of land allotted to them in lieu of pay.

Ghazan khan himself resides in the fort of Deer, and has 140 horse and 400 foot constantly about his person, whom he pays in ready money. The following are the names of the hills in Ghazan khan's country,

First Maujah to the south, well wooded, having an ascent of four kos, and the same descent. There are plenty amlook and other trees; snow lies on the summit throughout the year. The road from Bar Swat to Deer leads over it, which is impassable to camels and horsemen, footmen even finding difficulties. Monkeys, apes, bears and tigers abound, and are to be feared, so are the thieves infesting it; such are not to be heard of in the jurisdiction of Ghazan khan.

The second hill is the Barawal to the west, having walnut as well as other trees. The ascent and descent are each five kos; much snow falls. There is an iron mine.

The third hill is that of Deer, to the north, very high, having an ascent and descent each of seven kos; snow always remains on it throughout the year.

The fourth hill is called Kumbad, to the east, the ascent is seven, and descent six kos. There is an iron mine, the metal of which the inhabitants extract. The road to Bajour passes this hill, frequented by Bujour, Deer, and Kashkar merchants. Ghazan khan is on friendly terms with Shah Katal of Kashkar, and Meer Alam of Bajour, and is at enmity with Zaidulla khan, Babozai Swatee, and Anayatulla khan, Rarenzai.

There are a number of hills besides these. The Khwazozais are divided in Maleezais, Shameezai Nurlee khels, Shameezais Pinkce khels.

The Shameezais to the west, muster 5,000 matchlock men, and have 3,000 jarebs of cultivation, under Buland khan, and Sara'ee, and Sayud Azam khan. The names of the villages are,

Barangola, contains four hujrahs, under Nahit khan and Buland khan.

Badawan, under Ojee khan, Ghawaz khan, and Sayud Azam khan, contains four hujrahs.

Chack Darrah, under Akal khan, and Dilawar khan, contains four hujrahs.

Sih Sadah, under Noor Alec khan, contains four hujrahs.

Ooch, under Ghulam Muhaiyadeen khan, and Maksood khan, contains four hujrahs.

Katyaree, under Raman Shah khan, contains five hujrahs.

Shewah, contains six hujrahs, under Munawisar khan.

Palah Mandai, under Hoorah khan, contains four hujrahs.

Neegwalai, under Ahmad khan, contains three hujrahs.

Kajookam, under Fazal khan, contains four hujrahs.

Damghar, under Ghafar khan, contains four hujrahs.

Seen Sarai, under Aman Shah khan, contains four hujrahs.

Gadai, under Nyamutulla khan, contains three hujrahs.

Doorgai contains four hujrahs, under Assalla khan.

Chalgar, under Muazzam khan, contains four hujrahs.

Other villages are in the defiles, and on the hills, containing ten or twenty houses each. The inhabitants are owners of herds and flocks.

The Shameezais muster 7000 matchlock men, and have 11,000 jars; Beshah khan is their chief, and Kamal khan, Muazzam khan, Kahur khan, and Arsulla khan. The villages extending for fifteen kos, are the following,

Shilpum, contains four hujrahs, under Kahur khan.

Shakur Darrah, contains five hujrahs, under Arsalla khan.

Baba khel, under Muazzam khan, contains six hujrahs.

Teensat, under Padshah khan, contains four hujrahs.

Khadhadsha, contains four hujrahs, under Anwar khan.

Baidarah, contains five hujrahs, under Kan khan.

Dursha khel, contains four hujrahs under Kamal khan.

Kalat, the principal village of the Shameezais, contains fourteen hujrahs, under Beshah khan.

Sekhras, under Kamal khan, four hujrahs.

Doda, contains four hujrahs, under Ahmad khan.

Dursha khel has four hujrahs, under Raham khan.

The Nepkee khels, called Naipee khels, Mirlee khels, extend twelve kos to the north. They muster 9,000 matchlockmen, and have 15,000 jarebs.

Jahkandara has four hujrahs, under Painda khan.

Kanjoor contains three hujrahs, under Ourang khan and Fazal Shah, and Roshan khan.

Neem galai, two kos to the south, two hujrahs, under Jamad khan.

Dehli, one kos to the south, two hujrahs, under Arab Shah.

Barah Bunda, one and half kos to the south, contains four hujrahs, under Roshan khan, son of Arsalla khan, Neepee khel.

Koozamandai contains four hujrahs, under Malah Shah, Meeran Shah and Arab Shah, one kos distant.

Damghar contains three hujrahs, at one kos to the south-west, in the plain from Barah Banda, under Rahmat Shah.

Dumgram contains two hujrahs, at one and a half kos, under Mahammad Zaman khan.

Koojkanjoo, one and a half kos to the south of the road in the plain, on the bank of the Swat river, two hujrahs.

Barkanjoo contains two hujrahs, under Nooran Shah and Shekh Gulpurust.

Their is a large village, ten kos from Kanjoo, having five hujrahs, under Gulistan khan, Paindah khan, and Shah Beg khan.

Two kos, on the skirts of the hill to the west, is a village called Seenai, containing three hujrahs, under Yoosaf khan, son of Umar khan.

Further to the north, is a village called Sar Sodai, two kos from Aleegram, containing four hujrahs, under Jadullah khan, and Faiz-talab khan, Myan Ahmad Noor, Speen Myan Abdullah khan, and Awal khan, in the plain. Their drinking water is from a stream that comes from the Manjuh hills, to the north; the whole of the lands of Swat depend on the rain.

There is a village, Mande, where merchants exchange their salt, cloths, and oil, and cotton, for rice and wheat. The copper coin current are Mansoorie pais or Mansoor khance, and they prefer old round Ghunda rupees, indeed no others are current. There are no Hindoo shops throughout the country of the Pingee khels, the only merchants being Paranchas and Mullas, who command great credit; the people

are very unruly, but are held in some check by Ghazan khan of Deer.

Three kos to the north is the village of Toot Banda, under the Manjah hills, having three hujrahs, under Maddat khan.

To the north-east is another village, called Manjah, under the hill of that name, containing 127 houses, under Jalat Khan.

To the north, within the defile of the hill of Manjah, one and half kos, (the road over the hill leads to Deer) is the village of Kalakee, containing seventy houses, under Myan Ahmad Gul and Speen Myan; walnuts and Amlook trees are plentiful. I went by this road myself to Deer.

The Mooleezai Khwazozais inhabit the hill defile towards Deer.

Passing the Manjah hill there is the village of Tangee, consisting of two hujrahs, under Shad khan, under the hill to the west of the road.

Two kos further is the village of Kandareen, consisting of three hujrahs, under Mazroob Shah khan, Saidoo khan and Marghoob khan. A stream flows below the village, having its rise in the Manjah hills, of ten mill strength, and empties itself into the river of Deer. The people of the country live chiefly on rice.

Two kos further, in a defile, is the village of Chagliareen, consisting of two hujrahs.

One kos further is the village of Shakandair, consisting of two hujrahs, and containing 100 houses, under Noor Shas khan.

One kos further is the village of Ateetai, containing 100 houses, and consisting of one and a half hujrahs, under Sahab Shah khan.

Further, beyond the stream to the south of the road one kos, is the village of Razagam, consisting of two hujrahs, and containing 300 houses, under Kutub Shah khan.

After leaving the defile of the Manjah hill, is the village of Tor-Sang, two kos to the north on an eminence, containing 700 houses. It is on a table land, the ascent to which is half kos.

The road to Deer passes by it to the north. The Malikis are Buland khan, Alee khan, and Saadat khan. Under the village to the west, flows the river of Deer, beyond which to the west, are very high mountains. There are a very few villages across the river, not so on this side, as far as Deer.

Seven kos to the north, from Tor-song, is the village of Jughabunj, having 200 houses, and one and a half hujrahs, under Buland khan and Mahammad khan, and Mulla Sayad Alee.

Four kos further to the north is the village of Bebiyoor, having 200 houses and one and a half hujrahs, under Ahmad khan.

Three kos further, is the village of Dardarah, having eighty houses, under Ameer khan and Buland khan, on an eminence to the east of the road to Deer.

Two kos further is the village of Hindookais, having eighty houses, under Afzal khan.

Three kos further is the village of Benimazee, having 100 houses. On the road there is a stream flowing from the hills to the east, and falling to the west into the river of Deer, over which is a wooden bridge, twenty-three kadams long.

On the bank of the stream to the east, is the village of Katalai, having fifty houses, and on the opposite bank is the village of Kadeekat, to the west.

Three kos further from this to the north, is the village of Kotalai. These villages are under Hasan Alee khan, a relation of Ghazan khan, chief of Deer, from whom he has them in jagire.

Two kos further is the village of Tangai, having 50 houses, under Ghulam Kadan khan.

Three kos further is the village of Hindookar, having 80 houses, under a man of Ghazan Khan.

Three kos further is the village of Jablook, on an eminence to the east, having 90 houses, under Azeemulla khan.

Three kos further to the north is the village of Kotakai, having 70 houses.

Three kos further to the north-east is the town and fort of Deer, under Ghazan khan, son of Karam khan, son of Mulla Ilyas, a Barah khel, Maleezai, Kliwazozai, Akozai, Eesafzai. situated on a high table-land, 100 jarebs of which is cultivated.

The fort of Deer, which is situated on the table-land, is of an oblong shape, and has two gates that a horseman can ride through, one to the north facing the Kashkar road, and the other to the south facing Swat and Bunher. The walls of the fort are 12 zirahs high, 400 long, and 300 broad, having six bastions, five along the walls, and

one at the Harem Sarai of Ghazan khan. Within the south gate of the fort to the west there is a large mosk, where lessons are given by the Imam of the mosk, Kazee Abdurahman Akhund; and further beyond the mosk entrance to the west, is the residence of Ghazan khan. There are sixteen shops of Hindoos, five of which are grain-sellers, two druggists, and two cloth-sellers; and seven of Musulmans, four of which are goldsmiths, and three dyers: there are three blacksmiths' shops, and two carpenters. There are 220 houses, and an armoury of 300 matchlocks, and fifty Jazaeers, each two and a half guz long.

Ghazan khan has seven sons: Rahmatulla khan, aged 12 years; Jahandad khan, ditto 9; Hameedulla khan, ditto 7; Habeebulla khan, ditto 7; Sultan Mahammad khan, ditto 5; Azeezulla khan, ditto 3; and Azeemulla khan, ditto 1 year.

He has four wives and many slave girls, and may be forty years of age; of a middling stature, fair complexion, and black hair. He is neither extravagant nor stingy, and is fond of hunting. He is on friendly terms with Meer Alam khan, and with Shah Katal of Kashkar, and at enmity with the Siahposh Cafers.

Deer is surrounded by mountains, on which snow lies all the year round. The country is very cold, and the color of the inhabitants is sallow from the disease of the spleen that they all have. They live chiefly on rice boiled soft, well mixed with ghee: wheaten bread they eat as fruit, (a treat). Their fires are lighted night and day on account of the cold. The ground is damp and swampy, therefore the inhabitants board their floors.

Fir, Pine, Walnut, and Amlook trees are exceedingly plentiful. The gates of the fort are left open.

The manager of Ghazan khan, is one of his slaves, by name Abdul Kadar; and his confidential adviser is Kazee Mulla Abdu Rahman. Another of his slaves, by name Mahammad khan, is the fort Katwal. He has always in attendance 200 foot and 40 horse. He appoints others to districts and villages, from which they draw their own pay.

There are two roads from Deer to Bajour: one winding through defiles to the south-east, by the side of the river, towards the Kunateer road; the other over the Barawal hills, on the south of which is Bajour. It has an ascent of six kos, and a descent of three. It is

well wooded, and affords plentiful pasturage to the inhabitants. It is crowned with perpetual snow, and an iron mine is said to exist in it. It is not passable for camels, indeed the inhabitants know not the animal by sight. On the northern side of the hill is Deer; and on the southern side, in the Darrah of Jandawal, is the village of Akhund Mullah Timmur khan.

From Deer to the north-west are mountains inhabited by Neemchah Musulmans, in which the Musk-deer abound, the hunting of which affords occupation for numbers. A quantity of honey is also produced.

Below the fort of Deer to the east, flows the river which comes from Kashkar to the north, and flows to the south. In it Otters are very abundant, which the inhabitants catch for the sake of their skins to make Posteens, or skin cloaks. These skins, with musk-bags, honey, ghee and silk, are articles of export.

Merchants from Kashkar and the Kohistan, bring Cashkar "Shalukees," and Chapkans (woollen fabrics), and in exchange take away grain.

The merchants from the Eesafzai country and Peshawar bring oil, cloth, cotton, sugar and spices, and take away musk-bags (Nafa), otter (Saglahoo) skins, honey, ghee, silk, and Kashkar "Shalakees."

The road from Swat to Deer is not practicable for camels, horsemen pass along the river with difficulty, merchants carry their goods on mules, bullocks, and men. The inhabitants know not what elephants or camels are.*

I will give specimens of the dialects spoken by the Neemchah Musulmans of the Kohistan, and by the people of Kashkar and the Baroohee (?) (Purmoolee)—(Furmulee).

* A story is told illustrative of the gross ignorance of the primitive Affghans. A camel that had strayed from an encampment of merchants, found its way into a Barakzai khel, (they tell the story themselves,) where one had never been seen. The whole Khel was struck with awe, and were at a loss, all but the village Mulla, who, although as ignorant as his neighbours, determined not to appear so, and therefore boldly suggested, or rather affirmed, that it was the Almighty himself, which they all believed until a young one also made its appearance; and they enquired of the Akhund how the first one could be God as he had no fellow. The Akhund, not taken aback, boldly rebuked them thus: "Why, you fools! the second is the Prophet to be sure." This story I have heard half a dozen times from the blasphemy-dreading, holy-war-making Affghans!

After visiting Deer I returned by the road I came to Jaghayanj, twelve kos, whence to the village of Chaklai is five kos, and thence two kos to the east Atnar Darah. From this to the village of Tormany is three kos to the west, in a defile. In the road is a river which comes from Deer, and passing through defiles joins the Bajour river, which falls into the Swat river, which again falls into the Kunar and Cabool river, which finally falls into the Abaseen, or Attock.

Three kos from Tormang to the east, is a valley in which is the village of Khaeel, having three hujrahs and 600 houses, and close by is a square fort having four towers, containing thirty houses, under Irah khan. There are houses besides without the fort, and 600 jarebs of cultivation on the bank of the river.

From Bajour as far as Khaeel, there is a gun-road, but not so into Deer.

From the above place, one kos, there is a village on an eminence, containing 160 houses and one hujrah called Manjai, under Shadee khan. One kos further to the west there is a large fort containing 200 houses, and a large village containing 1000 houses, under Muekum khan and Shadee khan, called Kilah-i-Shadee khan. Half a kos further is the large village of Kanateer, containing 2000 houses and 40 shops and 16 hujrahs. It is a mart for merchandize, under Naseem khan and Umra khan, each of them have 40 horse and 2000 matchlockmen. The boundaries of Bajour Swat and Deer meet here. The place is under Ghazan khan.

Three kos to the west is the village of Dedai, having 160 houses, under Faiztalab khan.

Here two roads separate, One to the south-east, through the defile of Katgallah leads to Swat.

The other to the north leads over hills to Bajour via the village of Karhadah. Thus from Deraï comes the village of Khemna, containing 200 houses, under Abdulla khan, Farkaride, in Bajour, the road is through a narrow defile which is passable for guns.

Five kos further to the south in Bajour on a plain, is the village of Kadhadah, and on the road there is a square fort built, containing 120 houses, under Faizulla khan.

To the south are hills inhabited by Utman khels, amounting to 10,000 matchlockmen, an unruly set, independent of Meer Alam

khan, of Bajour, and of Ghazan khan of Deer, and of every one else. They are noted for bravery, and live in houses and eaves on the hill sides. These hills are partly in Bajour and partly in Swat, and are full of remains of Cafer buildings, from which the Utman khels extract copper coins and utensils, and often gold, and sell them in Bajour. The road over these hills is very difficult for horsemen ; merchants cross with guards with fear. Meer Alam khan tries to conciliate them, as he fears them.

He has more than once taken a force against them, which they have as often defeated. The chiefs of the Utman khel are Khad, Umra, Narai, Bandil, Dilban, and Mardan. They bring honey, oxen, sheep and ghee to Bajour for sale, and purchase cloth and salt to take home.

They sometimes propose to take service, and get jagires and lands allotted for their support, but as soon as they reap their harvest they take to plundering their neighbours, and then to their hills, and defy Meer Alum khan. Every one is chief of his own land, and is under no control. Wheat is much cultivated in these hills by means of springs. The hills are well wooded, and game of every kind is abundant.

From the above village of Kadhadah one road leads to the east to Swat, thus,

Two kos from Kadhadah in the plain, is the village of Gulderee, having 400 houses, under Mulla Daraz Akhunzadah. Thence the Shekah road leads to the east.

Two kos further is the village of Chinah, having seventy houses, beneath which flows the river of Bajour. The land has capabilities, but the tyranny of Meer Alam khan has laid it waste. Guldad khan, a man of Meer Alam khan's, is their immediate ruler.

One kos further, on an eminence to the east of the road, is the village of Yakburj, having eighty houses, under Mahammed Ameer khan, over a bad narrow stony road, very difficult, for camels.

To the south-west of the road is the junction of the Deer and Bajour rivers, whence they run in one stream to Swat ; the road is in a narrow defile called Shikah.

Six kos further is the village of Shamsce khan, on the skirt of a hill to the south of the road, having 850 houses and ten shops. The

cultivation is chiefly in the plain to the north, lalmee. The chiefs are Afzal khan and Misree khan, it is in Swat.

One kos further to the east, on the road, is a large square fort, containing 200 houses, where Misree khan, a man of Ghazan khan, is stationed to collect duties from merchants trading between Bajour and Swat, bringing from Swat salt and oil laden on bullocks. From each load, whatever it may be, 3 shais and 2 paisa is levied, which in the year amounts to 7,000 rupees.

Two kos further to the east is the village of Ainlook Darrah, to the south of the road, containing 400 houses, under Padshah khan.

On the hill to the south there are six towers of a large size, and other marks of buildings.

On eminences and in valleys there are very many villages in a good state of repair, having no inhabitants, but difficult of access. The chiefs are Anayatulla khan and Khairulla khan; copper and gold coins are found in these deserted buildings.

Two kos further is the village of Nasapa, containing 100 houses, and many remains of ancient buildings, which no doubt composed towns.

Two kos further to the south is the village of Gumbat, containing 200 houses, behind which on the hill skirt is a very large tower of the times of the Cafers, of excellent construction; but the villagers have pulled it down in parts to make their houses of its bricks and stones.

It is hollow, and has three doorways, the entrances through which are winding. It is said that below this dome the treasures of the ancient kings lie buried.

I visited the place, and searched in vain for an inscription. It is situated in the boundary of the Khwazozais, under Ghazan khan.

Two kos further is the village of Katgalah, containing 100 houses, the road is difficult for camels. Here also on the skirt of the hill, ancient buildings are numerous, like deserted towns. It is in Swat, under Ghazan khan.

One and a half kos further is the village of Talash, on the road at the entrance of a defile, having 200 houses.

Passing the defile a plain is entered, having 500 jarebs of lalmee cultivation, and 100 of abee (rice).

Two kos further are two villages, called Chounnee, containing each 400 houses, under Sayad Aman khan, Swatee, a man of Ghazan khan, the inhabitants a lawless set, and no one can pass the plain without guards, which is called the Dasht of the Shamseezais.

Three kos further to the north, is the village of Shewah, having 800 houses and twenty shops, a mart for merchandize, under Ghazan khan, being on the mercantile route from Bajour to Swat, about 2000 jarebs of lalmee cultivation.

Four kos further to the south east, on the banks of the Landai Swat, there is the large village of Chakdarrah, having 1,200 houses, mostly merchants, included in Swat. Shamseezais by tribe, under Ghazan khan, six hujrahs.

Below the village to the west, is a ford across the river, (no boats or rafts.)

Beyond the river is the boundary of Anayettoola khan, Rarenzai, and the village of Alladaud, in which he resides; on the other side are the Shamseezai Khwazozais, under Ghazan khan. This is the boundary.

There is another road to Bajour from Kurhadab, six kos is the village of Munda, having 2000 houses and 100 shops, under Mahammad Ameer khan, Kochai, brother of Meer Alam khan.

The whole pergunnah of Bajour contains 1,25,000 jarebs, and its revenue amounts to 2,60,000 rupees, in ready money and kind collected on the seed (Kalang), of which Meer Alam khan receives 2,000,000 with his brothers, 40,000 rupees is received by Ameer khan, of Nawazai, an enemy of Meer Alam's, and 20,000 rupees is received by Ghafar khan, the son of Haiyat khan, the chief of Jandawal and Barawal, who is also an enemy of Meer Alam khan's.

The following are the boundaries of Bajour. To the north in the direction of Deer, the Jundawal and Barawal hills; to the south (twenty-five kos length,) the Darrah of Nawazai, and the pergunnah of Kunar. To the east the Darrah of Badwa and the hills of Cuner; to the west (twenty kos breadth,) Pashit and the Darrah of Baboo Karah.

The chief within these boundaries is Meer Alam khan, the son of Allaiyan khan, Salarzai Tarkadeir.

He has thirteen guns, (seven iron taken from Ghafar khan, son of Haiyat khan, and six of copper, ? of his own) forty Shaheens, 700 large Jazacers, 8,000 foot, 2,000 horse, six pairs of state drums and

twelve state horns, (Karna,) and standards; in fact he keeps up a regal state. Besides he has Jagiredars.

His whole yearly expences amount to 1,12,000 public, and 8,000 private (stable, table and wardrobe,) ; 50,000 rupees he pays as revenue whenever any one on the part of the king is sent strong enough to enforce the payment, the remaining revenue enters his treasury.

He has absolute authority over his people, even extending to their wives and daughters, and no one demurs or objects to his disposing of their sisters and daughters.

His friends are Ghazan khan of Deer, and Anaiyatalla khan of Swat ; and his enemies are Ameer khan of Nawazai, and Ghafar khan of the Darrah of Jandawal, these he has partially subdued, and possessed himself of parts of their territories.

He is also on friendly terms with Sardar Sultan Mahammad khan, Barakzai, of Peshawar.

Six of his guns are alone mounted on carriages.

The following are the principal places of Bajour :—

Gumbhad, in a valley to the east, under Myan Sahib, furnishing 300 matchlockmen, revenue 3,000 rupees in money and kind. There is an iron mine in the hills, they were formerly under Ghafar khan, now under Meer Alam khan. They collect the iron from the sand of river beds. The pay of Myan Sahib is 800 rupees.

Jundawal is a valley of the Barawal hills, extending to Deer to the north, under Sifat khan, 4,000 matchlockmen, revenue 5,000 rupees. There is an iron mine which is worked. The pay of Sifat khan is 1,000 rupees.

There is another village in the valley of Maidan, which commences in the Kashkar hills to the north, itself bearing east. The inhabitants are Purmoolee, (Barhooee ?) under Meer Aman khan, 2,000 matchlockmen. Revenue 3,500 rupees, pay of the chief 400 rupees. There is an iron mine in the Maidan valley, and a river running from north to south. Kanbat, consisting of 9,000 houses with its dependent hamlets, 5,000 matchlockmen. Iron is found in the neighbouring hills which border on Kashkar ; name of the chief, Meer Aman khan, son of Meer Alam khan. Revenue 10,000 rupees in money and kind. His

jaghire, Maiyar, rent free, the estate of Myan Shekh Umar, of Chamkane. Revenue 7,000 rupees under the Myan's daughter. It contains 3,000 houses and forty shops. It is resorted to by merchants, who bring from Kashhar, silk shalakees and chughas, and take back salt, cloth and cotton. The inhabitants were ryots of Ghafar khan, they are now of Meer Alam khan.

From Maiyar, northwards to Zar Mandoo, there are four forts of Shekh khels, under Doola, brother of the late Mujabid khan, 2,000 machlockmen and 4,500 houses. Their custom is that every one who holds three papatahs of land must furnish a matchlockman to the ruler. A papatah takes three kharwars of seed.

Mundah, in jagire to Ameer Mahommad khan, alias Kochai, brother of Meer Alam khan, a brave soldier, having command of 12,000 matchlocks, (footmen,) and 100 horse. He sometimes rebels against Meer Alam khan.

There is another village in a valley called by some Shikah, having eight forts, by tribe Utman khels, who take service under no chief, nor were they ever. When Meer Alam khan marches against them, they declare themselves subjects, and Meer Alam contents himself with their nominal submission, and retires.

There are four forts to the west, called Wadah Banda, in jagire to Juma khan, brother of Meer Alam khan, who has command of 6,000 matchlockmen, and forty sowars, and is night and day employed in hostilities with the Utman khels; revenue 7,000 rupees, his jagire.

The Shahar, or capital of Bajour, is the residence of Meer Alam khan himself. It contains 1,000 houses and eighty shops, and is a mart for merchandize; revenue 9,000 rupees.

In the hills to the west, in the valley of Rodbar, are the tribe of Mahmoodces, who muster 10,000 matchlockmen, they have no Maliks; revenue 4,000 rupees. If the ruler is strong they pay, otherwise not.

To the north is the village of Pishut, in the valley of Baba Karah, in jagire to Painsah khan, brother of Meer Alum, 4,000 matchlockmen; revenue 7,000 rupees; tribe Salurzai Ibrahem khel.

There is another village to the west, called Chahar Sang, furnishing 3000 matchlockmen, under Meer Alam khan.

There is another village called Kotakee, 3,000 matchlockmen (foot) and 1000 horse, in jagire to Meer Aman khan, son of Meer Alam khan revenue 2000 rupces.

Another village is Nawahzai, the residence of Ameer khan, the enemy of Meer Alam khan. There is also a fort on an eminence, stony and difficult ; there is a spring in it. The fort has eight towers.

There are houses right and left, under the fort in the valleys east and west of the fort, the road through them running north and south. The garrison of the fort consists of 500 footmen and 400 sowars. Jazaeers are mounted all round the fort walls, as are two guns. He has 2,000 footmen and horsemen, and his expences are 20,000 rupees, and he collects his revenue on the kalang. The position is a strong one, and Meer Alam khan can do nothing against it. He is on friendly terms with Ghafar khan, with Saiyad Bhawadeen Padshah, of Kunar, and with Ameer Dost Mahammad khan of Cabool and with the sons of Fatoolah khan of Goshta.

He is powerful, conciliating, and of a liberal disposition, and has absolute power over his subjects.

The Safees of Surkh Kunar are also subjects of Ameer khan, amounting to 6000 matchlockmen, who reside in the valleys of the hills, their cultivation depending on the rain ; they have scarcely sufficient drinking water for themselves and cattle.

Proceedings of the Asiatic Society of Bengal, OCTOBER, 1845.

The monthly meeting of the Society was held on Friday evening, the 3rd October, at the usual hour, S. G. T. Heatly, Esq. senior member present, in the chair.

The proceedings of the meeting of August were read and confirmed.

The following Members, proposed at the August meeting, were balloted for and duly elected: C. S. Hardinge, Esq., P. S. to the Right Hon'ble the Governor General.

Manuckjee Rustomjee, Esq.

And the following new member proposed:

Lieutenant D. Briggs, B. N. I., proposed by R. W. Frith, Esq. seconded by H. Torrens, Esq.

Capt. Marshall objected to the irregularity of the meetings. He was answered by the Secretary, that for the last day of meeting there was nothing to be done, and that it was postponed by order of the Senior Vice-President. Capt. Marshall said at all times there might be matter for a meeting, and objected, generally, to the omission of a night of meeting; did not think that such irregularity did good to the Society, and further proposed a resolution bearing upon the points agitated by him, which it was decided, after some discussion, would better be circulated to resident members as notice of an intended motion to be brought forward and fully discussed at the next regular night of meeting.

Capt. Marshall acceded to this suggestion and the Secretary received instructions accordingly.

Read the following list of books presented and purchased since the last meeting:

List of Books received for the Meeting of the Asiatic Society of Bengal, Friday, the 3rd October, 1845.

Presented.

Meteorological Register for July and August, 1845, from the Surveyor General's Office.

Calcutta Christian Observer for September, 1845.—By the Editors.

Oriental Christian Spectator, for August and September, 1845.—By the Editor.

Proceedings of the Geological Society of London, 1843-44, No. 99, vol. IV.—By the Society.

London, Edinburgh and Dublin Philosophical Magazine, No. 173, for April, 1845.—By the Editor.

Journal of the Royal Geographical Society of London, vol. 13, Part II. 1843.—By the Society.

Bulletin de la Société de Géographie, Troisième Série, Tome I. Paris, 1844.—By the Society.

Jahrbücher der Literatur, 1844, Nos. 105 to 108, 4 vol.—By J. v. Hammer-Purgstall.

La Rhetorique des Nations Moosulmans, Traduite du Persan par G. de Tassy. Paris, 1844, 2 copies.—By the Translator.

Natural History, Diseases, &c. of the Aborigines of Brazil, translated from the German of Dr. v. Martius, by J. Macpherson, Calcutta, 1835.—By the Translator.

Transactions of the Irish Academy, vol. 20, Dublin, 1845.—By the Society.

Arabic Syntax, by H. B. Beresford, London, 1843.—By the Author.

Note on the Historical Results from the Discoveries in Affghanistan, by H. T. Prinsep.—By the Author—2 copies.

Zeitwarte des Gebets, Arabisch und Deutsch, von J. v. Hammer-Purgstall. Wien, 1844.—By the Author.

Map of India, 1845.—By the Hon'ble W. W. Bird.

Grammar of the Language of Burmah, by T. Latter, 1845.—By the Author.

Selection of Papers from the Records of the East India House, 4 vols.—By H. Torrens, Esq.

India House Papers—Marquess of Hastings, 1 vol.—By H. Torrens, Esq.

Presented by His Imperial Majesty the Emperor of Russia.

Tibetisch Deutsches Wörterbuch, von J. J. Schmidt. St. Petersburg, 1841, 1 vol.

Grammatik der Tibetischen Sprache, von J. J. Schmidt. St. Petersburg, 1843, 1 vol.

Der Weise und der Thor, Tibetisch und Deutsch, von J. J. Schmidt. St. Petersburg, 1843, 1 vol.

Mongolisch-Deutsch-Russisches Wörterbuch, von J. J. Schmidt. St. Petersburg, 1835, 1 vol.

Grammatik der Mongolischen Sprache, von J. J. Schmidt. St. Petersburg 1831, 1 vol.

Die Thaten des Bogda Gesser Chans, aus dem Mongolischen übersetzt, von J. J. Schmidt. St. Petersburg, 1839, 1 vol.

Ch. M. Frähnii recensio numorum Muhammedanorum, Petropoli, 1826, 1 vol.

Jbn. Fozzlan's und anderer Berichte über die Russen älterer Zeit. Text und Übersetzung, von C. M. Frähn, St. Petersburg, 1823, 1 vol.

Die Münzen der Chane vom Ulus Dschutschis, von Th. M. Frähn. St. Petersburg, 1832, 1 vol.

Sammlungen historischer Nachrichten über die Mongolischen Völkerschaften, durch P. S. Palas. Petersburg, 1776—1801, 2 vols.

Archiv für Asiatische Litteratur, Geschichte und Sprachkunde, von J. v. Klaproth, Erster Band. St. Petersburg, 1810, 1 vol.

Catalogue de la bibliothèque d'Edeluniadzin, par M. Brosset. St. Petersburg, P.

- Arithmetik (in Georgian) by A. Ponofa. Kasan, 1837, 1 vol.
 Monographie des Monnaies Armeniennes, par M. Brosset. St. Petersburg, 1839.
 Dictionnaire Géorgien-Russe-Français, par D. Tchoubinof. St. Petersburg, 1840, 1 vol.
 Description Géographique de la Géorgie par C. Tsarevitch Wakhoucht, publiée par M. Brosset. St. Petersburg, 1842, 1 vol.
 Podcoigri Jspolunago Zaslygh Geror, etc. par R. J. Chumda. St. Petersburg, 1836, 1 vol.
 Sahb Jshi Jsinle ili Tnoecklin par Kitichimli, Tikstomb. St. Petersburg, 1839, 1 vol.
 Asseb-o-Sseirb ili Semb Planet, etc. par Seüda Mykhammeda Rishi, Kasan, 1832 1 vol.
 Kitaiskar Grammatika, Petersburg, 1838, 1 vol.
 Mongolbscae Khrestomatic, par O Cobalibseinh, Kasan, 1836-37, 2 vols.
 Sogranie, etc. Mongolbscii Beybien, etc. Kasan, 1841, 1 vol.
 Grammatika Tyreiko, Tutarchago Kasan, 1839, 1 vol.
 Armeno Pyssei Slowarg, Moskwa, 1838, 2 vols.
 Persidehae Khrestomatic, Moskwa, 1832-34, 3 vols. in 2.
 Mongolbscae Khrestomatie, Kasan, 1836, 2 vols. in 1.

Presented by His Majesty the King of Holland.

- Museum Anatomicum Academiae Lugdunae Batavae, descriptum ab Edward et Gerhard Sandifort, Lugdunae, 1793—1835, Fol. 4 vols.
 Verbandelingen over de Natuurlijke Geschiedenis der Nederlandsche overzeesche Bezittingen, Uitgegeven door J. C. Temminck, 1 vol.
 Tabulae craniorum diversarum nationum. Ed. G. Standifort, Lugduni Batav. 1838 to 1843, fol.
 Historia Jemanae sub Hasano Pascha, Ed. Ant Rutgers, Lugduni, Bat. 1838, 1 vol.
 De Expugnatione Memphidis et Alexandriae liber, vulgo adscriptus Abou Abdallae, Mohammedi Omari filio. Textum Arabicum ed. H. A. Hamaker, Lugduni Bat. 1825, 1 vol.
 Abul Abassi Amedis, Tulonidarum primi, vita et res gestae, Auth. F. Roorda. Lugdun; Bat. 1825, 1 vol.
 Specimen Criticum, exhibens locos Ibn Khacanis de Ibn Zeidouno. Ed et. Lat. vert. H. Engelin. Weijers. Lugd. Bat. 1831, 1 vol.
 Nieve Proeve om de Arabische Letters door het gewoon Europeesch Karakter onderscheidenlijk uit te drukken. Voorgesteld door H. E. Weijers, Leyden, 1840, 1 vol.
 Specimen e litteris Orientalibus, exhibens majorem partem Libri As—Sojutii, de nominibus relativis inscripti, Arab. ed. P. J. Veth, Lugd. Bat. 1842, 1 vol.
 Pars reliqua Libri As—Sojutii, etc. Ed. P. J. Veth, Lugd. Bat. 1842, 1 vol.
 Specimen e litteris Orientalibus, exhibens diversorum scriptorum locos de regia Aphtasidarum familia, Ed and Lat. vert. M. Hoogoliet, Lug. Bat. 1839, 1 vol.
 Sojutii Liber di interpretibus Korani. Arab. Ed. A. Meursinge, Lugd. Bat. 1839, 1 vol.
 Taalibü Syntagma dictorum brevium et acutorum, Arab, Ed. and Lat. vert J. J. P. Valetton, Lug. Bat. 1844; 1 vol.

Books Exchanged.

- Journal Asiatique, 4me Série, Tome III., IV. Nos. 19 and 20, Tome 5th, No. 21.
 Calcutta Journal of Natural History, No. 22, July, 1845.

Athenæum for June 21st, July 5th, 12th, 19th, 26th, and August 2nd, 1845.

The Asiatic Journal and Monthly Miscellany, No. 24, April 1845, 3rd Series, vol. 4th.

The Edinburgh New Philosophical Journal.—By Professor Jameson, January to April, 1845.

Books Purchased.

Journal des Savants, January to March, 1845.

Classical Museum, No. 8, July, 1845.

Annals and Magazine of Natural History, vol. 15th, No. 101, Supplementary number. New Cratylus.—By J. W. Donaldson, Cambridge, 1839, 1 vol.

Travels in Kashmir and in the Punjab.—By Ch. v. Hügel, London, 1845, 1 vol.

Description of Hindoostan.—By W. Hamilton, London, 1820, 2 vols.

Voyage from England to India.—By E. Ives, London, 1773, 1 vol.

Memoir on the Mahrattas.—By V. Blacker, London, 1821, 1 vol.

Read extract of a letter from the Rev. J. Moore, Agra, as follows :—

“ I should be glad if the Society would still further reduce the price of their Books. I could then be more bold and make larger indents on you.

I shall send your Sanserit list in a day or two, with such additions as I can glean here.”

The Secretary was directed to enquire to what amount Mr. Moore hoped to be able to dispose of the Society's publications, expressing at the same time its wish to afford him every assistance in so doing.

Read letter from B. C. Colvin, Esq., Officiating Register, Sudder Dewanny Adawlut, as follows :—

No. 1215.

To the Secretary to the Asiatic Society.

Nizamut Adawlut, Present : J. F. M. Reid, Esq. Judge.

SIR,—I am directed by the Court to transmit to you two Copies of a Report of a trial for Rebellion held at Maulmain, and the painting and images therein alluded to, for the purpose of being deposited in the Museum of the Asiatic Society, if deemed fit objects by the Committee of Papers.

B. C. COLVIN,
Officiating Register.

Fort William, the 12th September, 1845.

Ordered that, with the best thanks of the Society for this highly curious communication, the painting be placed in the Museum, and the Report printed in the Journal.

Read the following letter from W. Prinsep, Esq. relative to the picture of Mr. Thoby Prinsep.

H. TORRENS, Esq. *Secretary to the Asiatic Society, Calcutta.*

MY DEAR TORRENS,—My absence from London, Sir Edward Ryan's engagements, and other things have prevented my being able earlier to inform you of the completion of Sir Edward Ryan's picture for the Society. It is now however being packed for shipment and my friend Henderson will advise you when and how it is forwarded to you.

The cost of this picture has been : Advanced on first-sitting

to Mr. Lawrence,.....	£	40	0	0
Balance paid this day as per agreement,		31	10	0
Freight, Insurance and shipping, by Roberts, Mitchell and Co.		3	10	0
	£	75	0	0

Thoby and I drew upon you before for £100 on account of the two pictures, Sir E. Ryan's and his own. We now draw for £35 at 1s. 9d. (or Co.'s Rs. 400)—to meet the above sum, which we pray you to honor in favor of Roberts, Mitchell and Co., and the remainder will be drawn as soon as Mr. Say shall have finished the picture of my brother, but here I am sorry to say we have been delayed by the severe illness of the painter, who has all this season been unable to proceed with his work. He has very nearly finished the likeness which is admirable, but the remainder has a good deal to be done to it. I am however in hopes that the painter, who is now recovering in the country, will before the end of the year be able to complete the picture, which I am sure will give your Society great satisfaction—to whom, I beg you will explain that it has been from no neglect on the part of your delegates that you have not sooner received the pictures which were ordered.

W. PRINSEP.

Read the following correspondence :—

To H. TORRENS, ESQ. *Secretary to the Asiatic Society.*

SIR,—I have received from Lord Derby a quantity of wiring to set up as an aviary, wherein his lordship wishes me to take charge of any Pheasants, &c. which his correspondent may send up from the hills, or which I may be able to procure for him until I can get them shipped. And I write now to ask whether it would be agreeable to have the same set up in the Society's compound in place of the bamboo erection which is there at present. In granting permission it would be as well, for form's sake to acknowledge the aviary as belonging to Lord Derby, and not to the Society, in case his lordship might ever wish to have it removed, which however is not very likely. To the Society, its being built on the premises would often be very convenient.

Your's respectfully,

E. BLYTH.

September 12th, 1845.

Note.

I have to submit the accompanying proposal to the Society :

A handsome aviary put up free of cost would be an object for us to secure. How far, under existing circumstances, we should be right in countenancing Mr. Blyth, who already complains of having much too much to do, in becoming the collecting Agent of an English Ornithologist is a question to be considered.

H. TORRENS,

Vice-President and Secretary, Asiatic Society.

September 13th, 1845.

To E. BLYTH, ESQ.

SIR,—I have the honor to acknowledge the receipt of your letter under date the 12th instant, relative to the construction of an aviary on the Society's premises.

2. In reply I have to state, that under all the circumstances of the case, the proposal made by you in behalf of Lord Derby is acceded to.

3. You are requested to submit a note of the probable size of the aviary, and to consult with the Secretary as to the site, which may be perhaps so selected as to make the object on ornamental and attractive one on the premises. It is of course understood that the aviary remains a fixture pending communication with the party at whose cost it is erected.

4. The charge of the birds on account of Lord Derby is a duty which the Committee conclude will in no way interfere with your professional pursuits on the Society's account.

H. T.

The proposal was generally approved, and the Secretary was requested to superintend the erection of the intended structure, in communication with Lord Derby on the subject.

Read the following letter from the Asiatic Society of Ceylon :—

The Secretary of the Asiatic Society of Bengal.

SIR,—I am directed by the Asiatic Society of Ceylon to order for their use the Journal of the Asiatic Society of Bengal. On your sending me an account of the annual subscription an order for the amount shall be sent, in the mean time you will perhaps oblige the Society by sending a copy of the last addressed to me.

WM. KNIGHTON,
Honorary Secretary.

Colombo, August 18th, 1845.

Resolved that the Secretary be desired to express the gratification of the Society at the prospect of an intercourse with that of Ceylon, and to request its acceptance of as complete a set of the Society's Researches and Journal as can be now procured, free of expense, and that the same be regularly forwarded to it in future.

Read the following letter from the Baron Von Hammer Purgstall :—

SIR,—I have the honour of transmitting by your channel to the Asiatic Society, the set of the Vienna Review of the last year, together with a small Arabic prayer-book of mine, and to be with the highest regard,

Sir, Your's most humble, most obedient servant,

J. HAMMER PURGSTALL.

Vienna, the 8th of February, 1845.

The beautiful translation of the Arabic Book of Prayer was much admired, and the Secretary was desired, specially, to express the best thanks of the Society for this valuable addition to its library.

Read the following letter of the Chief Librarian to the King of Prussia :—

To the Honorable the Vice-President and Secretary of the Asiatic Society of Bengal.

SIR,—Having received through His Excellency Dr. Eichhorn, His Majesty's Minister of Public Instruction, a copy of the standard works in and upon the Arabic, Sanscrit and Thibetan language, published by or deposited for sale with the Royal Society of Bengal, and sent to His Excellency, with your letter dated September, 1843. I feel it an incum-

bent duty to address you, Sir, begging to accept my best thanks for your kind mediation in forwarding the valuable gift to Berlin, and to oblige me by expressing to the Royal Society, my sense of deep gratification at the reception of a present for the Royal Library, which proves doubly valuable at a moment when the study of Eastern languages and literatures in Berlin is taking a new development by the acquisition of the whole manuscript collection of the late Sir Robert Chambers, which from His Royal Majesty's munificent donation has been incorporated into the institution under my care.

The Royal Library having hitherto not been in possession of any volume of the *Ināya*, and now received only the volumes 2, 3, and 4, I should feel exceedingly thankful, if by your kind interference the first volume was to be added to the gift of the Royal Society, or perhaps could be procured at our expense, in which case I should be happy to get, if possible, also the 17th volume of the Transactions of the Royal Society, the only which we have hitherto been unable to procure, and the volumes 1—7 of the Journal of the Asiatic Society; the Royal Library being in possession of the Asiatic Researches, T. 1—16, 18—20 (P. 1, 2,) and the Journal, New Series, T. 8—11, (P. 1, 2.) Mr. Wattenbach of the house of Huschke, Wattenbach, and Co. at Calcutta, would on account of the Royal Library willingly repay the expenses incurred by you.

His Excellency intends writing himself in order to thank you for the gift, which has been disposed of in favour of our institution and of the Library of the University at Halle, and proposes to send you as a proof of his sense of gratitude, several works published by order and under the auspices of Government, viz. the complete edition of Aristoteles by Benker, and the Thesaurus Inscriptionum by Boeckh. As member of the Royal Academy of Science, whose library is distinct from the Royal Library, I may add, that we should be happy to present you also with a copy of our Transactions from 1825 to 1843, 25 vols. in 4to. if you would like to receive them; and perhaps the Asiatic Society would agree to a continual exchange of their Transactions, the library of the Royal Academy being hitherto not in possession of any of them.

I have the honor to be, with the highest consideration,

Sir, Your obedient servant,

DR. PERTZ.

Chief Librarian of His Majesty and Counsellor of Government.

Berlin, 10th June, 1845.

REPLY.

TO HIS PRUSSIAN MAJESTY'S CHIEF LIBRARIAN.

SIR,—I am charged to express to you the high satisfaction of the Asiatic Society of Bengal at finding that their Oriental publications have been so acceptable to the excellent Institution at the head of which you preside, and that His Majesty has been pleased to direct His Ex. Dr. Eichhorn to take an occasion of acknowledging them.

I shall have pleasure in procuring if possible, and forwarding free of cost, the 1st Vol. of the *Ināya*. The 17th Vol. of our Transactions, I am directed to take an early opportunity of sending to you from the Asiatic Society of Bengal.

The early numbers of the Society's Journal will, I fear, be procured with difficulty, and as they are the property of myself in succession to my lamented predecessor, James Prinsep, not I am afraid without my being compelled to draw on Huschke, Wattenbach, and Co. for their cost. This is owing to the Journal having been up to the commencement of the year 1843 published as the property, and at the risk of the Society's Secre-

tary, an arrangement now superseded by a better plan of management, its property now vesting in the Society.

I am directed to acknowledge with the expression of our sincere gratification the pro-Bekker's Arist. mised donation as per margin, and to state that the Society thank-Boerckh's Ther. Inst. fully avails itself of the offer to supply from your Royal Academy of Science, the Transactions from 1825 to 1843, and will gladly continue to interchange its own transactions for them in future.

I take this occasion of stating that you will, I trust, receive by the beginning of next Istallahat-i-Soofeea, Ed. year, one or two of the latest Oriental publications as per margin.

Dr. A. Sprenger. The Society will also despatch when complete a Sanscrit Anthology
Tareekh-i-Nadirree, Ed. Soc. Asi. Ben. gy now in the press, edited by Dr. Hæberlin, one of its members. The second volume of the Naishada, which will make that work perfect, will be our next undertaking, and will I hope shortly be commenced on.

I have, with the expression of my high respect and consideration, the honour to subscribe myself, &c.

H. TORRENS.

Read the following letter :—

To the Secretary of the Asiatic Society, Calcutta.

SIR,—In forwarding No. VIII. of our Journal for the acceptance of the Bengal Asiatic Society, may I request you will do me the favor of submitting to the Committee of your Society the enclosed Prospectus of our Journal, which will in future be published by subscription, and not from the funds of our Society as heretofore. In intimating this may I further request your good offices in obtaining on your side of India subscriptions to the work ; which will be forwarded per Banghy to any part of Bengal. I shall feel extremely obliged if you will have the kindness to send back the subscription list at your earliest convenience.

JAMES BIRD,
Secretary.

Bombay Branch Royal Asiatic Society, 28th July, 1845.

Ordered that the letter and Prospectus be printed in the Proceedings, as being the best assistance which the Society can give, and that names of subscribers be received by the Society for the Bombay A. S.

PROSPECTUS.

Quarterly Journal of the Bombay Branch Royal Asiatic Society, edited by the Secretary.

The Committee of the Society, appointed at the Meeting of the 12th December last, to audit the accounts and for other financial objects having reported that the expenses of the Quarterly Journal can be no longer debited to the current Income of the Society, but must be liquidated from special subscriptions to this individual object ; the Secretary begs leave to intimate his willingness to carry on this publication under the auspices of the Society, provided nearly sufficient subscriptions, among the Resident, Non-Resident Members of the Society and others, are obtainable for defraying the expenses of publication. Situated so favourably as we are in Western India, for investigating and illustrating peculiar and particular objects of research relative to *Hindu Mythology, Philology, and History*, we are in possession of exclusive advantages for acquiring novel and useful information on the *Ethnography* of the various Asiatic races and regarding the *Geography*

and *Natural History* of the neighbouring countries; and on the *Palæography* and *Arts* of their inhabitants; placed as we find ourselves between *Arabia*, *Persia*, and *Tartary* on the one hand, and *Egypt*, *Ethiopia*, and *Africa* on the other. With such advantages of locality it seems incumbent on us and the Society to diffuse and make known that information, (on various subjects of Oriental Research,) which many, the Editor has found, are willing to collect and communicate. No exertion of his shall be spared to make the Journal as extensively useful and interesting, on all subjects, as the advantages of the locality naturally promise; and he is sanguine, from the assistance hitherto given, that the exertions of contributors will rather increase than diminish. The size of each number will be generally about a hundred octavo pages with Lithographs: for which it is proposed to charge Rupees 2 to Members of the Society, and Rupees 2-8 to *Subscribers* not Members. The following are the contents of the October Number, now nearly ready for issue from the Press. 1st. Two ancient Inscriptions in the Cave character and Sanscrit language translated into English. 2nd. An account of the temple of Somnath, and translation of a Sanscrit Inscription found there. 3rd. The late Mr. Prinsep's correspondence relative to Indian Antiquities. 4th. Hamaiyari Inscriptions from Aden and Saba translated into English. 5th. Geological observations on the alluvial soil of Sindh, and hills in the neighbourhood of Hyderabad. 6th. Observations on the Runic Stones of Scotland. 7th. Notice on Hindu gold coins found in the Southern Konkan, and on the gold Zodiac coins of the Emperor Jehangir. 8th. On the origin of the Hamaiyari and Ethiopic Alphabets. 9th. Analysis of a work, entitled *Historical Researches* on the origin and classes of the several Cave temples of Western India. 10th. Literary and Scientific notices. 11th. *Proceedings of the Society.*

At the January Monthly Meeting of the Society, the following gentlemen subscribed their names to the continuation of the Journal: and such Resident Members of the Society as are disposed to support it will favor me with their names and address.

JAMES BIRN,
Secretary.

Bombay Branch Royal Asiatic Society's Rooms, 23rd June, 1845.

Read the following letter from the Geological Society of London:—

TO H. TORRENS, Esq.

SIR,—In reply to your application respecting certain missing numbers of the *Proceedings* of the Geological Society, I am requested by the President and Council of the Society to inform you, that they have much pleasure in directing that those numbers should be forwarded to the Asiatic Society of Bengal immediately, and without any charge.

I am also instructed to express through you the thanks of the President and Council for the donation of the *Researches* of the Asiatic Society of Bengal, which they have received from that Society.

WILLIAM HAMILTON.

Geological Society, Somerset House, April 5th, 1845.

The Map of India presented by the Society's late President the Honourable W. W. Bird, was exhibited and directed to be placed in the Library.

Read the following note from the Baron des Granges, accompanying the presentation referred to :—

To the Secretary of the Asiatic Society.

Baron des Granges humbly presents to the Secretary of the Asiatic Society, a few specimens of his first crop of Nutmegs in his Plantation at Mergui—which Nuts become more remarkable, as they are not only the first raised, and in so high a latitude as Mergui, but because they will be under the circumstances, also the last grown at Mergui, at least in the Baron's Plantation.

Calcutta, 9th August, 1845.

Read the following letter from James F. Corcoran, Esq. :—

To H. TORRENS, Esq., &c. &c. &c.

DEAR SIR,—I have been advised by persons who know best about these matters, to defer the publication of the *Guldastâe Ishk* until the public are somewhat more acquainted with me; because as that book is a mere collection of tales, and is high-priced besides, I should not get sufficient subscribers for it until people know what ability I possess to get creditably through such a work. I have, therefore, determined on first publishing the little book of translation, (whose Prospectus I beg herewith to send,) in order that as the price is low and the original in universal estimation, there may be a chance of its selling well and of paving the way for the more voluminous *Guldastâe Ishk*—which would then be viewed with some respect; as a stranger, with whom, though personally unacquainted, yet of whose merits we have heard enough to give him a warm welcome.

I entertain great hopes that your patronage will be extended to me, and if, through your influence, the Asiatic Society would condescend to honor me with theirs, my little work would glide glibly into existence.

JAMES CORCORAN.

Calcutta, 23rd June, 1845.

Ordered that the Society subscribe for ten copies of the work, and that it do afford Mr. Corcoran the advantage of making his work better known by printing the advertisement and specimens in the *Proceedings*. They are as follows :—

Advertisement of a new Translation of Esop's Fables, into the Urdû Language, by Mr. James Francis Corcoran. Respectfully dedicated to Robert Haldane Rattray, Esquire, B. C. S. Judge of the Sudder Nizâmut and Diwâni Adâlat.

The Grecian Fabulist has for some years been before the Public in a Hindûstani dress; and some explanation may therefore be deemed necessary, as an apology for the present repetition. I presume not to say that the translation now offered is better than the one we have: this the Public must decide. I may, however, exhibit those pretensions to their patronage which I imagine to be mine; and this done, I will patiently await their judgment.

In the present version I have endeavoured, first, to render the Urdû more colloquial and spirited than it is in the old translation; and, secondly, the moral of each fable has

been attempted in poetry, with the view of ennobling the reader to remember its application to the occurrences of life.

The Persian Lokman said, that he had learned good breeding from the vulgar, by never imitating their actions. In like manner I owe an acknowledgment to the former translator; since the rock he struck upon has warned me to shape my course, as I hope, more successfully. He has failed by too rigid an adherence to literal translation; the respective idioms of Urdú and English so materially differ, that what is witty and energetic in the one language, literally rendered in the other becomes dull and vapid. A pardonable licence has accordingly been taken, whenever the genius of the original or the turn of the dialogue appeared to require it. I have not, however, indulged in too many liberties with my author; bearing in mind that "between freedom and impertinence there is but a step."

Occasionally, a trifling addition has been made to the moral of the fable; with an attempt to avoid sameness, by exhibiting the sentiment, sometimes in lively, sometimes in serious, verse.

It is proposed to print at present, Part 1st of the Translation, comprising 50 Fables, and during the next quarter of the year, "Part 2nd," provided the humble Translator be honored and encouraged by the extension of a remunerating patronage.

اشتہار

یونان کے طبقے میں ایک شخص حکیم منس تھا جسکا نام اسپ مشہور ہی اور جسکی تصنیف لڑکے سے بوڑھے تک سب کو پسند ہی اور اسکا ترجمہ سب زبانوں میں ہوا ہی چنانچہ اُردو زبان میں بھی نہایت مشہور ہی اگرچہ اس کتاب کا ترجمہ اُردو میں جاری ہی مگر عامی جمس کارکن نے دوبارہ اس کے ترجمہ پر اُس بزرگ کی خواہش اور ارشاد سے کمر باندھی ہی جسکے علم اور فضل کے باران فیض سے باغ انشا پر دازی کا شاداب اور زمین شعر گوئی کی سیراب ہی چونکہ بذمے کو معلوم نہ تھا کہ سخن کے بازار میں اس انمول جواہر کے کتنے خریدار ٹھہریں گے اس جہت سے فقط پچاس نقلوں کا ترجمہ بالفعل چھپے گا اور آئندہ انشاء اللہ تعالیٰ اگر زندگی باقی رہی اور لوگوں نے قدر دانی کی تو ارادہ ایسا ہی کہ باقی جو نقلیں رہ جائیں گی سب صاحبوں کی خدمت میں پیش ہوئیں گی اور اس ترجمہ کی ایک نقل بطور نمونہ کے اس اشتہار کے ساتھ چھپی ہی * — قیمت

ہر جلد کی دو روپیہ * جن صاحبوں کو اس کتاب کے لینے کی خواہش ہو انہیں چاہئے کہ مہربانی کی راہ سے اپنا نام و نشان یا جای سکونت اسکے ساتھ جو مادی کتاب ہی اسمیں مندرج کر دیں فقط

SPECIMEN OF TRANSLATION.

Fable of the Lion and the Mouse.

شیر اور چوہے کی نقل

ایک دفعہ کسی شیر کے پنجوں تلے ایک چوہا آگیا اور شیر نے اُسے مار دینے کا قصد کیا مگر جب اُس بیچارے نے بہت آہ و زاری سے اپنی جان بخشی چاہی شیر نے اُسے رہائی دی چند روز کے بعد انقلاب روزگار سے ایسا ہوا کہ وہی شیر ایک شکاری کے دام میں آگیا لیکن جب اُس چوہے کو یہہ وحشت ناگ خبر ملی اُس نے اپنے محسن کی مدد کی اور بات کے کہتے جال کو کترا اور شیر کو خلاص کر دیا فقط

حاصل

بتایا ہی گرتجہ کو حق نے امیر * * * ندیکہ ان غریبوں کو ہرگز حقیر خبر اپنی گردش کی بھی ہی کہیں * * * کہ ایک حال پر کوئی رھتا نہیں کیا جس نے رحم اُسے پایا ہی رحم * * * خدا اُسکا ہی جس نے کپایا ہی رحم

Read the following Memorandum from the Sub-Secretary:—

MEMORANDUM.

Extract from a letter from Dr. Sprenger to the Sub-Secretary.

I have found a copy of the book which I have published on Sufism here and see the edition is very correct. The Society would do me a favour if it would send some copies to Europe for sale to the Asiatic Society at Paris, and to Mr. Norris or Mr. Neal, clerks to the Asiatic Society in London, requesting them to send the same to Brockhaus at Leipzig and other places with the books of the Oriental translation committee, in order to render the publication known.

The Secretary notes with reference to this Memorandum, that Dr. Sprenger's suggestions have already been acted upon.

Read the following letters from the late Major Leech and R. C. Cust, Esq., B. C. S.

TO H. TORRENS, Esq. *Secretary, Asiatic Society.*

MY DEAR SIR,—I have the pleasure to inform you that I will despatch by banghy dawk to-day or to-morrow, for presentation to the Asiatic Society, three other MSS. relating to the History of the Afghans, and a History of Herat, with the commencement of our Abstract of the same.

It had been my intention with the above materials and those already in the possession of the Society (History of the early Abdalees) and with the History of Ahmud Shah Duranee forwarded yesterday, to have compiled a History, but I have not hitherto had, nor do I see any prospect of my ever having the requisite leisure.

An accident moreover that my small library met with (vide the damaged state of the MSS.) a few months ago, has determined me to lose no time in placing the valuable MSS. in a safe place.

The Society are of course at liberty to put them at the disposal of any person having more leisure than myself to extract what is interesting in them.

R. LEECH,

1st A. G. G. A., N. W. P.

Umbalah, 7th August, 1845.

TO H. TORRENS, Esq.

MY DEAR SIR,—I have the pleasure to inform you that I will to-day or to-morrow transmit by banghy dawk, for presentation to the Asiatic Society, the History of Ahmad Shah Duranee, in Persian, accompanied by an abstract of the same. I have every reason to believe that the work is a scarce one. It was procured by me after several years' search in Afghanistan. The original (the one from which this is a copy) is in the possession of one of the Princes at Peshawar.

R. LEECH,

1st A. G. G. A., N. W. P.

Umbalah, 5th August, 1845.

TO H. TORRENS, Esq.

MY DEAR SIR,—Among the papers upon the table of my lamented friend Major Leech, I found when taking charge of his office at Umbalah a letter from yourself, dated the 20th ultimo, open, but unanswered, conveying to him the thanks of the Asiatic Society for his map of the Kurukhetra. He received it a few days before he died, and one of his last acts was giving instructions to his Pundit and Mapper, with regard to the completion of the interesting work, which he had in part forwarded to you. In this part of the world we have much to regret his loss, and his papers shew the number of scientific and curious researches in which his active mind was unceasingly employed, of the results of which the Journal of the Asiatic Society has more than one specimen. Some of the works which he forwarded to Govt. have not yet seen the light. I trust that they may (especially a contribution upon the subject of the Sikh religion) some day be published.

It appears from your letter about the Kurukhetra that you are in the belief that the whole of the narrative to accompany the map has been forwarded to you:—if I am not in error, a great portion is still unfinished, but I have directed the Pundit employed to proceed in his works, and if you desire it I will forward it to you. I have been aware of Major

Leech's interesting project from the first day that it was started by him, and I trust therefore that I shall be able to assist you to whatever may appear necessary to complete it. I am having a copy of the map made in the Persian character,—and I should suggest also having a translation of the narrative also made in the Persian language, as after all Sanskrit is a language known only to few, and the Mahá Bhárata itself is better known in its Persian translation, I suspect, than in the original : at any rate publishing the map and pamphlet in Persian, would greatly extend the publicity of the work, though I am afraid it would entail a considerable additional expense on the Society. I am having a copy also of the map prepared in *Goormukhee*, the sacred character of the Sikhs; and here a question is started whether a work should not be struck off in that character also. The whole of the Kurukhetra is included in the territory of the Sikhs—the chiefs who now possess the country, except those parts which have lapsed to us, know and read no other character, and one of Major Leech's objects was to present to each chief a copy of the map, if possible one of an ornamented kind (perhaps in gold letters on parchment)—of course the value would to them be increased if they could read the names on the map, and understand the words of the account, which they certainly would not do in Persian or Sanskrit. It would be a desirable result if these chiefs could be prevailed upon in return for the compliment of the map to subscribe towards establishing an efficient college for the study of Sanskrit and *Goormukhee* at *Ghanesun*, a holy place within the limits of the Kurukhetra. We have an inefficient college for Sanskrit at Umbalah, but on a very limited scale. Do you think the Society would object to making a donation to the Pundit, who has been zealously employed in this work for six months? Major Leech's sudden death has of course left the accounts of all the parties employed unsettled. I feel too happy to take upon myself all charges connected with so interesting an undertaking, but the Pundit with a natural pride in his work seemed anxious for some acknowledgment from the higher powers. I therefore take the liberty of bringing it to your notice. He is the head of our Umbalah Sanskrit College.

ROBERT CUST,
Civil Service.

Simlah, 12th September, 1845.

The letters being read the Secretary begged leave to express to the Society the irreparable loss it has sustained in the death of Major Leech ; a gentleman not less distinguished for his eminent services as a public officer than for his professional abilities and extensive knowledge of native languages, history, manners and customs ; his untiring zeal and industry in researches connected with these subjects, and the noble liberality of mind with which he on so many occasions has communicated the fruits of his knowledge and labour for the public benefit from 1838, in which year his first contribution, *A grammar of the Brahoocce, Beloochee and Punjabee languages*, adorned the pages of our Journal. Vol. VII. p. 780.

There is indeed too much reason to fear that, like the lamented James Prinsep and others, Major Leech has fallen a victim to excessive mental labour ; adding another to the long catalogue of the truly noble men

who have perished in their exertions to forward, in common with the Asiatic Society, the high task and duty of every liberal, right-minded, and educated Englishman in this country—the task and the duty of aiding in every way to give to the British power in India, for the great ends which it has yet under Providence to accomplish, those means and that stability which can only be found and assured for it by the one great essential to the right exercise of the power of every foreign government—an intimate knowledge of the country and of the people over which it rules.

Read the following letter from Capt. Phayre, Bengal Native Infantry, Assistant to the Commissioner of Arracan.

MY DEAR TORRENS,—I have just arrived here from Sandoway, and as Latter is here and I am anxious to have the advantage of comparing along with him all the various Arakanese coins, will you kindly put those you have of mine on a wax-cloth package, and send them by dawk banghy bearing postage to my address at this place. Latter is working away gloriously and will produce many a fine paper on Boodhism—he has made wonderful progress since I last saw him. The Society's Journal will, I hope, receive many contributions from him. Pray don't forget the coins, and believe me,

Very truly your's,
A. P. PHAYRE.

Akyab, Sept. 25th, 1845.

I know not if you recollect an English translation of a part of the *Dhammathat* you once sent to Major Williams down here ; if you can forward it to me I can now compare it with an original I possess.

The Secretary noted with infinite regret that these coins had shared the fate of our collection, and he was requested to inform Capt. Phayre accordingly.

Read the following letter from the Zoological Curator :—

To H. TORRENS, Esq. *Vice-President and Secretary, Asiatic Society.*

SIR,—Among the *Rodentia* of Captain Hutton's Afghanistan collection, is a small animal which I described long ago in the Society's Journal by the name *Georhychus fuscocapellus*, placing it thus among the Lemmings ; but now that we have specimens of the true Scandinavian Lemming in the collection, I find that the Afghan species can no longer be admitted exactly into the same genus, and am under the necessity of establishing a new one for its reception.

Under these circumstances, I write to request that Mr. Hendrie be employed to figure this animal and its skull, as was done with the *Caprologus*, and that on the second or skull-plate, I may also have represented certain crania of Seindian and Afghan Hedgehogs which it is desirable should be figured.

An extra copy of the last No. of the Journal has been forwarded to Major Jenkins, containing the figures and description of *Caprologus* ; and with respect to the additional

wiring required for the aviary, I expect to be able to furnish an estimate of the expense at the Society's forthcoming meeting.

Your's very respectfully,

E. BLYTH.

Asiatic Society's Museum, 1st Oct. 1845.

The proposed plates were sanctioned.

Read extract of a letter from J. Muir, Esq. C. S., transmitted by Messrs. Ostell and Co. as follows:—

There are among the Researches of the Asiatic Society of Bengal, two papers on the Religious Sects of the Hindus, by Professor H. H. Wilson, the first in the 16th vol. containing 136 pp. quarto, and the second I think in the 18th vol., but I have not the means of referring to it. I should feel obliged by your looking at both papers and informing me what it would cost to reprint both (1000 copies in octavo,) in a style similar to that in which the Journal of the Asiatic Society of Bengal is printed, as to type and paper. Of course the reprint could be only done by the Asiatic Society, or with its permission.

(Signed) J. Muir.

Azingurh, Sept. 1st, 1845.

Resolved, that the Society will be most happy to allow the reprint of the papers as proposed, stipulating only that "Reprinted from the Researches of the Asiatic Society, vols. 16 and 17," appear on the title page.

Read the following letter from Capt. Latter, Bengal Native Infantry:—

To H. TORRENS, Esq.

MY DEAR TORRENS,—I send you according to promise, the remarks on the Booddhist sculpture sent some time since by me to the Society. As my paper is likely in some points to interest people in Europe—might I ask your kind attention to the accents, &c. of the Greek quotations and to the Hebrew which the compositors are likely to spoil. As also, that if possible the paper may not be divided. It is perhaps rather long—but I had so much to say on the subject, that I could scarcely make it shorter. Would you kindly let me have the full fifty copies (I only got thirty of the note on the coin). I propose to intitle the communication "The Booddhism of the Emblems of Architecture" or any other which you may think advisable. Phayre begs me to beg you to send him back the Burmese or rather Arracancse coins. He is very anxious about them, as he wants to make out a paper, which from what he says is likely to appear very interesting. I am afraid you will think the communication I now send rather singular—"Paul, a master Mason!" but I am thinking of inflicting on you a still more singular paper. On the Nine Sacred Jewels of Booddhism. I am only waiting till I can get from home Orpheus' hymn "Perilithon."

THOMAS LATTER.

The paper accompanying this was referred to the Editors of the Journal for early publication.

Read the following letter from M. Lienard, of the Mauritius :—

MONSIEUR,—Mr. Thomy Hugon m'ayant dit qu'il vous serait agréable d'entretenir des relations avec Maurice, je viens sous ses auspices vous proposer un commerce d'échange d'objets d'Histoire naturelle.

Pour débiter, je remets à Mr. Hugon, que veut bien s'en charger, la tête et la caudale d'un Istiophore qui a été pris sur nos cotes. J'y joins une caisse de coquilles de Maurice et de Diego Garcia. Parmi celles de Diego vous trouverez une paire de houlettes que j'ai pêchées moi-même dans l'immense baie de cette île. Jusqu'ici on croyait que la mer Rouge seule recevait ces bivalves.

Je désire, Monsieur, que ce petit envoi vous soit agréable ; vous pouvez compter que je ferai tous mes efforts pour satisfaire à vos demandes et entretenir ainsi un commerce qui ne pourra qu'être avantageux à tous deux, et qui me sera particulièrement agréable : Je serais flatté aussi d'entrer en correspondance avec la Société dont vous êtes membre.

Je suis un peu Zoologiste : C'est vous dire que tout ce que vous pourriez m'offrir en fait de mammifères, oiseaux, reptiles, poissons, mollusques, insectes, arachnides, crustacés, annélides et zoophytes, me ferait le plus grand plaisir : Je me bornerai pour le moment à vous designer spécialement un objet qui manque à mon musée. C'est un jeune Garial. J'ai des crocodiles de Java, de la cote Malabare, de Caleutta et de Madagascar.

Indiquez moi les objets de notre pays qui pourraient vous être agréables, Je m'empresserai de vos les procurer. Si vous desirez des poissons de mer et d'eau douce, nos cotes et nos rivières en fournissent une grande variété. Parmi ceux d'eau douce, nous avons L'osphronème, qui nous a été apporté de la Chine ainsi que la Dorade, plusieurs espèces d'Eleotees, de gobies, des doubles, des megalopes, des ambasses, des anguilles de deux espèces et le nestis connu vulgairement sous le nom de Chitte.

Si vous voulez bien m'envoyer des poissons du Gange et des étangs du Bengale, ayez l'obligeance de les mettre dans des vases avec de l'esprit de vin. Je vous renverrai les vases avec des poissons du pays.

Je remets pour vous à Mr. Hugon, une série d'observations météorologiques. Je pourrais vous envoyer celles que je fais chaque mois.

Recevez, Monsieur, l'assurance de mes sentimens distingués de considération.

(Signé) LIENARD.

Mon adresse est

Mr. Lienard père, vice President de la Société d'Hist. Nat. de l'île Maurice.

Rue de Castries, Port Louis.

The donations referred to have been subsequently received, and it was ordered that the Journal of the Society be sent to Mr. Lienard from the commencement of 1845, for the Société d'Histoire Naturelle.

The Zoological Curator was also requested to prepare a dispatch of such specimens and duplicates as could be obtained or spared, so as to meet as far as possible Mr. Lienard's wishes.

Read the following letter from P. J. Sarkies, Esq. :—

TO HENRY TORRENS, Esq. *Secretary to the Asiatic Society of India.*

SIR,—A Society having been lately established here by the Armenian community for the diffusion of useful knowledge amongst their countrymen, called the "Araratian Society,

or Society of Ararat," I have the honor, by the desire of the members, to address you this letter, and to request the favor of your presenting gratis to them all the Journals of the Asiatic Society from its commencement, and to continue the same throughout, for which they shall feel highly obliged.

Our object in requesting this favor is to translate the useful productions they contain into the Armenian language, and publish them in our Society's Weekly Journal, the "Patriot," for the perusal and information of those of our countrymen, who are unacquainted with the English language, both here and at other places. The first number of the said publication, I beg leave to forward you herewith.

Trusting that this application will meet with the favorable consideration of yourself, and the members of your Society generally,

I remain, &c.

P. J. SARKIES,

Calcutta, 22nd August, 1845.

Secretary to the Society of Ararat.

Ordered that the Society of Ararat be presented with the Journal from January, 1845, and in future as published.

Read the following correspondence which was approved and ordered to be published.

To the Secretary of the Asiatic Society.

SIR,—I have the honor to submit through you, to the Committee of Papers, the appearance of a memorandum in the Society's Journal tending, in a most serious manner, to implicate my character and reputation in the eyes of my scientific co-labourers, as deliberately advising a measure which is stigmatized in that memorandum with the name of "scientific fraud."

The memorandum in question appeared in the Proceedings of the Society for October, 1844, published in the 154th number of the Journal; and the paragraph to which I would draw the particular attention of the Committee is No. 6 (misprinted as No. 5).

I freely admit that upon more than one occasion, when the subject of Burnes's drawings was mooted *in conversation*, and also I think once in an unofficial note to yourself, I objected to the extreme rudeness and inaccuracy of certain of those drawings, and recommended that if such had to be lithographed, it would be better to correct the outlines where these were obviously erroneous, by putting such joints and muscles into the limbs of mammalia as they must necessarily possess, and even improving the attitudes in some instances, especially as Burnes's own specimens supply materials for the purpose to a considerable extent:—but most assuredly I never proposed that such alterations should be made without due notice being taken of the same, and can only express my astonishment that it should have been thought necessary to place the matter before the world in the light in which it has appeared.

The purport of my non-official recommendation will be best understood if I adduce two or three instances; and these, to the best of my recollection, shall be the very instances to which my remarks (in conversation) referred.

1. The figure of the Hyena of Cabool (now lithographed) will, in my opinion, disgrace the Society's 'Researches,' if it appears in them: but as the animal is perfectly well known, I believe I recommended that a proper *figure* of a striped Hyena should be designed, and the markings filled up from the drawing supplied by Burnes.

2. The figure of the wild sheep of the Hindu Kosh ranges, though altogether faulty in outline, is such that a really good figure might be taken from it, aided by very careful drawings from life which I possess of a closely allied species, the *Ovis musimon*, and by the real horns of the animal, of which several pairs were in the collection of specimens forwarded by Sir Alexander Burnes, and (with the exception of duplicates transmitted to the India-house, two pairs only being retained for the Society's collections) now under my charge in the museum.

3. To cite a bird, I remember instancing the *Falco chicquera*, of which the beak in Burnes's figure is very ill-shaped, and the legs and toes are very much too slender,—faults that, with others, might have been corrected (as in various other instances) by a reference to Burnes's own specimens. Had I been consulted in the matter, I should have done my utmost to dissuade the Society from expending money in the representation of this and many other common and exceedingly well known species, even had they been represented with the requisite accuracy.

But in suggesting the propriety of such alterations (whether rightly or not so in the opinion of the Committee), I do most distinctly protest against the imputed charge that I ever wished them to be effected privately, or in secret,—in other words, that I ever desired the Society should be guilty of a “breach of trust,” which I also would have considered to amount to “a scientific fraud:” and it is due to other zoologists that, I should now interfere in their behalf, to notice an allegation contained in the same paragraph of the same memorandum to the following effect:—

“That the now anxious search of all European naturalists is exactly to find the original drawings from which local found Ornithæ had been published, in order to correct these flourishes, and interferences of authors and naturalists; who, to make better pictures and reduce the birds (principally) to their fancied types and systems, had in many instances created enormous confusion, deprived the original observers of their due credit for active research and accuracy, and had even made them pass, at least as careless persons, if not as impostors; when, on the contrary, the mischief and imposture was the work of the naturalist editors, publishers, and artists.”

I believe, sir, that I have the credit, in well-informed quarters* of a tolerably familiar acquaintance with zoological literature, but I beg to say that I cannot call to mind *one single instance* to which the above remarks apply.

The confusion adverted to has, on the contrary, originated in the blind confidence which Latham more particularly, and some other ornithologists of the old school, and of a past generation, reposed in the rude drawings of unscientific artists; so rude, and oftentimes grossly inaccurate, that it is only now that the subjects represented have come to be, for the most part, familiarly known, that they can be recognised in the figures which were intended to represent them,—and that the names subsequently applied to the objects themselves can be superseded by those bestowed on the drawings, and heading the descriptions taken from the latter, in conformity with the admitted law of priority. Of the fact here stated, I could easily adduce instances almost without number.†

* Vide ‘Report of the British Association,’ for 1844, p. 187.

† In illustration, I send herewith two numbers of the ‘Annals and Magazine of Natural History,’ containing papers by Mr. G. Gray and Mr. Strickland, wherein the confusion that has resulted from the *very reprehensible practice of naming species from bad drawings* is well exhibited.

Such being the case, I venture to hope that the Committee will perceive the justice of retracting the very sweeping charge against "naturalist editors, publishers, and artists" which has appeared in the Journal of the Society: and that it will also admit that the grievous animadversions complained of, having reference to myself, were not merely unnecessarily harsh, but were altogether uncalled for, as founded on a misapprehension of my meaning. At the least, I consider that it was due to me to have been formally asked whether my opinions on the subject were correctly expressed, before such a procedure was resorted to as that of publicly stigmatizing them in the Society's Journal.

ED. BLYTH.

Asiatic Society's Rooms, Fort William, Aug. 23, 1845.

Note to the foregoing by the Secretary.

In submitting this note the Secretary desires to remark that Mr. Blyth takes a most mistaken view of the paragraph in question; inasmuch as, on reading it attentively, it will be clearly seen that no proposal of perpetrating any scientific fraud is attributed to *him*, but it is simply said that if the Society admitted corrections, it would perpetrate a fraud, and the Committee will remark that it is now fully and clearly admitted by Mr. Blyth himself, that he did propose corrections of joints, muscles and attitudes. How far those corrections were to go, will appear from par. 1 of Mr. Blyth's paper in which he distinctly again avows,—asserting that "the Cabool Hyena is perfectly known," which assumes but one variety to exist, and that we have so perfect a knowledge of the zoology of Afghanistan, that we can be certain that there is only one variety; and farther that, only one variety exists in the whole valley of the Indus, which would include Scinde, (where Sir A. Burnes's drawings commence.) Asserting and assuming all this at once then, Mr. Blyth proposed, he himself says, to substitute "a proper figure and fill it up with the markings of the Cabool Hyena."

2. Par. 2 of Mr. Blyth's letter carries the matter still further. Pronouncing on an animal which none but travellers in the almost untrodden regions of the Hindu Kosh have seen, and Dr. Lord alone perhaps examined as a naturalist, we are told that by reference to certain drawings of "closely allied species," the horns, &c., a good figure can be taken from it; so that here is the manufacture of two entire animals distinctly proposed as a mere matter of course! The same style of argument is continued as to the birds which are also proposed to be "corrected" from stuffed specimens in the face of drawings made from the life.

3. The Secretary presumes that these paragraphs most fully justify the caution and strict observance of the principle upon which the Committee acted, and which the Society approved; of keeping to rigid and exact copying: and the Committee's expressions (used to explain that strictness) that "if the Society consented to any such alterations, it would be guilty of a scientific fraud, publishing as the drawings made on Sir A. Burnes's mission, pictures of something else, &c." We have before us now two distinct proposals for making pictures; one of which may yet be carried into effect, if the Society approve of it.

In Mr. Gray's paper, it will be observed that an owl (*Athene convicens*) came thus to be described by Latham as a Falcon! &c. &c. See No. for March 1843, p. 189.

Vide also Mr. Strickland's remarks in the May No., p. 334; though I could wish that he had reflected more severely upon the above mentioned extremely objectionable practice on the part of Latham.—E. B.

4. Mr. Blyth now, for the first time, as the Secretary believes, informs the Society that it was intended "to notice all the alterations in the text." He does not perceive that this would amount only to the very stigma which the Committee have been so careful to guard the Society's reputation from. Let it be but once announced that the Society's Curators alter drawings; (except at the special desire of the authors) or its Secretaries papers confided to them, and who will trust such a Society with drawings or papers? or who will refer to its researches with confidence? Mr. Blyth's assumption here is (the notes of Dr. Lord having disappeared) that the Society and the scientific world are wholly to trust to his discretion and knowledge, and even, as in the case of the hyena and sheep, to that of which he can have no knowledge. Both the Secretary and Members of the Committee again and again explained to Mr. Blyth that the honest and straightforward and simple system was, to publish exact copies of the drawings, which would fulfil the Society's public duty, and that he would then have the best opportunities in the world of shewing his own knowledge of the subject, and of having something interesting to say about, perhaps, a very uninteresting bird or animal.

5. The Secretary cannot also on this occasion refrain from adverting again to the attempt to undervalue Dr. Lord's labours, to the extent, nearly, of asserting that he knew nothing of Natural History, in Mr. Blyth's MSS. excuse for the disappearance of the notes formerly submitted to the Committee, and this specially, as he is now enabled, fortunately to shew what the notes may have been, and how ill-deserved any dyslogism applied to them must be. A friend has pointed out to him the following passage which occurs at the close of a very able paper entitled, "*A Medical Memoir on the Plains of the Indus*," in the Eighth Vol. of the Transactions of the Medical Society of Bengal, Appendix, No. 24, p. 81.

"*Animals.* Of the animals to be found in these regions, I shall at present say nothing. They must be looked on as rather influenced by, than exercising any influence on the Medical constitution of the country, which it is my more immediate object to illustrate. But I may be allowed to add that between specimens and drawings,* I have already made some advances, as opportunities have allowed, towards a sketch of the Zoology of the plain of the Indus, which I hope at some future time to render so far complete as to be not unworthy of notice."

It will be seen from this that so far from being, as Mr. Blyth has put forward, "nearly ignorant of Zoology," Dr. Lord projected at least a Zoological Memoir.

The Secretary submits that so far from any blame attaching to the Committee (whose labours have already been approved by the meeting) the Society are greatly indebted to it for its steady opposition to this "correcting" system.

The Secretary does not conceive it necessary to remark on that part of Mr. Blyth's paper which enters into the defence of naturalist editors and artists generally, as being an accessory discussion, quite uncalled for, and which would introduce a precedent tending to check the free expression of opinions in Committees, and moreover, because he conceives that Mr. Blyth has himself, in the above quoted paragraphs, amply shown that, if allowed, he would himself have rendered (and if the Secretary understands his expressions with respect to the sheep correctly) would even *now* render reference to the original drawings

* "I should acknowledge with thanks that several of these drawings which had been made previous to my joining the Mission, were immediately on my arrival placed altogether at my disposal by Captain Burnes."

indispensible; at least whenever they had been copied without the text explaining the corrections.*

Mr. Blyth finally complains that the animadversions were harsh and published without reference to him. The Secretary has already stated that he wholly dissents from there being any animadversions at all conveyed or intended. The Committee for the Burnes's drawings felt themselves bound to give on this occasion a full and distinct history of the matter (see Report) to exculpate themselves from an apparent neglect of 7,000 Rupees worth of outlay under their charge, and he believes the feeling was, that the only possible motive which could be assigned for Mr. Blyth's open contempt of the Society's orders and wishes for three years, might be perhaps pique at not being allowed to alter the drawings; and thus that the Committee deemed it proper to enter fully on that question.

With respect to the non-reference to Mr. Blyth; what is alluded to in the memorandum is his proposal of correcting, which his present paper shews not to have been in the least overstated. The sequel is merely the statement of the Committee's grounds (acting for the Society) for rejecting that proposal, and Mr. Blyth himself gave rise to the publication of which he now complains by having been three years in default.

H. TORRENS,

September 3rd, 1845.

Vice-President and Secretary, Asiatic Society.

E. BLYTH, Esq.

SIR,—I am desired by the Committee of Papers of the Asiatic Society to acknowledge receipt of your letter of the 23rd August and to state in reply,—

That after an attentive consideration of it, the Committee have thought it right that it should be published in the Proceedings, as affording to the Society, and to the public in general, a full explanation of your views on the subject of the proposed corrections, and the knowledge that you by no means intended making these without a full account of them in the proposed text.

2. The Committee further desire me to state that they fully approve of the determination of the Committee for Sir Alexander Burnes's drawings to publish nothing as such, bearing the sanction of the Society's name, which were not exact copies of the originals as entrusted to it by Government.

Museum, 18th Sept. 1845.

I am, Sir,

Your's obediently,

H. TORRENS,

V. P. and Secy. As. Society.

Specimens of acorns and of fir cones from Darjeeling presented by
— Cockburn, Esq. were laid on the table.

The Curator of the Museum of Economic Geology and Geological and Mineralogical Departments had been unable, on account of illness, to prepare his report or to attend the Meeting.

The best thanks of the Society were voted for all the above presentations and communications.

* Refer also to the Note submitted at the former Meeting, in which the special instance of the hocks of the Elephant is adduced.

श्रीश्रोदुर्गा ॥

एसियाटिक् सोसाइट् संस्कृत नागराक्षर ॥

महाभारतं आद्यन्त ४ खण्ड	...	...	४०
महाभारतीयार्त्तगतसूचीपत्र आद्यन्त			
४ खण्ड	...	...	६
नैषध आद्यन्त सटीक् १ खण्ड	...	...	६
हरिवंश आद्यन्त १ खण्ड	...	...	५
राजतरङ्गिणी आद्यन्त १ खण्ड	...	...	५
सुश्रुत आद्यन्त २ खण्ड	...	...	८
सूची पुस्तकं १ खण्ड	...	...	१
लासनेन रचितं सर्व साधारण	...	...	४
गीतगोविन्द १ खण्ड	...	...	२॥
यज्ञदत्तवधः १ खण्ड	...	...	२२॥
शकुन्तला नाटक्	...	...	१०

فهرست کتابهای عربی و فارسی مطبوع که در خانه اشیا تک
سوسیته حسب تفصیل الذیل بقیهتهای مناسب برای فروخت
موجود اند

اسامي كتب	قیمت
فتاوی عالمگیری مرتب بشش جلد فی جلد	هشت روپیه
عنايه جلد ثاني وثالث ورابع فی جلد	... هشت روپیه
شرائع الاسلام	... هشت روپیه
انیس المشرحین	... پنج روپیه
جوامع علم ریاضی	... چهار روپیه
اصطلاحات صوفیه	... پنج روپیه
خزانة العلم	... هشت روپیه
تاریخ نادری	... هشت روپیه
فهرست کتب کالج فورث ولیم واشیا تک سوسیته	یک روپیه

For use in Library only

